



ROTA NCE

**Energy-efficient lightweight
chuck for maximum process
dynamics**

Robust lightweight chuck with up to 40% reduced moment of inertia at highest rigidity

The ROTA NCE unifies lightweight design, maximum load capacity and an extraordinary form language all in one. Ideal preconditions for high process dynamics. Particularly in large-scale production, it provides significant savings and is also ideally suited for the energy management certification DIN EN ISO 50001.



Advantages – Your benefits

- + Energy efficient thanks to extremely low moment of inertia**
Shorter cycle times and reduced energy costs
- + Connection dimensions 100% compatible with power lathe chucks from the Kitagawa BB200 series (up to size 260)**
Existing Kitagawa chucks can be replaced within a short time period
- + Precision wedge-hook power lathe chuck for highest quality requirements**
Allows excellent machining results
- + High efficiency of the wedge hook system**
Process-reliable clamping due to high clamping forces
- + Optimized lubrication system**
Consistently high clamping forces ensured
- + Modular center sleeve system**
Optimal adjustment to new clamping tasks thanks to the exchangeable center sleeves
- + 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
- + All sides of the functional parts are hardened and ground**
Ensures a long service life

Technical data

Description	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Through-hole [mm]	Piston stroke [mm]	Moment of inertia [kgm ²]
ROTA NCE 130-38	7500	45	19	3.2	38	14	0.009
ROTA NCE 165-53	6000	65	26	3.3	53	14	0.032
ROTA NCE 210-66	5000	100	38	4.2	66	18	0.08
ROTA NCE 260-81	4500	130	45	4.9	81	21	0.195
ROTA NCE 315-106	3500	155	58	5.8	106	25	0.44

Function of ROTA NCE

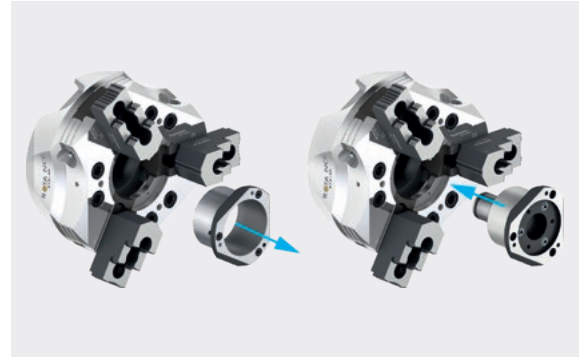
The axially movable piston transfers the force to the base jaw and generates a radial jaw movement synchronized with the rotational axis.



- 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 **Large through-hole**
For machining all conventional bar diameters
- ❹ **Optimized lubrication system**
For a high level of efficiency
- ❺ **Mounting thread**
For workpiece stops
- ❻ **Base jaw interface**
Inch, metric or with tongue and groove available
- ❼ **Jaw stroke display**
To verify the jaw stroke
- ❽ **Center sleeve**
With prefabricated mounting thread for the draw tube or drawbar
- ❾ **Weight-optimized design**
For great economy in daily use

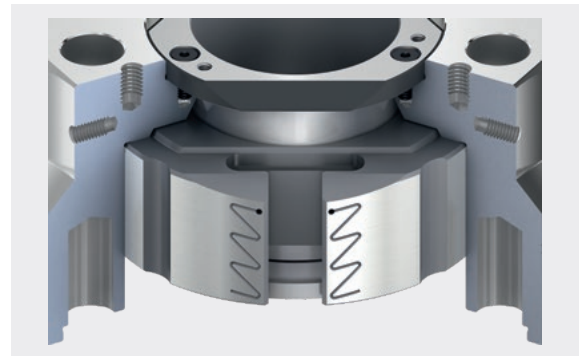
Changing the center sleeve

The modular center sleeves can be changed quickly and easily while the chuck remains mounted. When the three screws are undone, all the protection sleeves can be pulled off from the front and replaced.



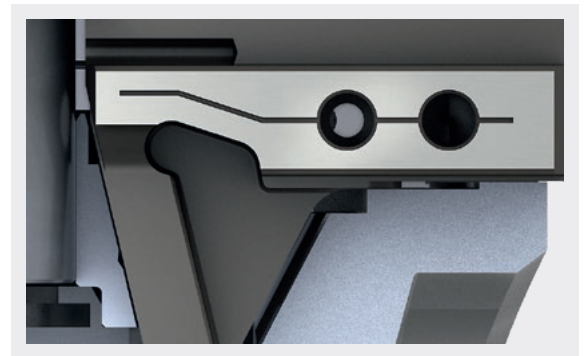
Long and precise piston guidance

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



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.



Jaw stroke display

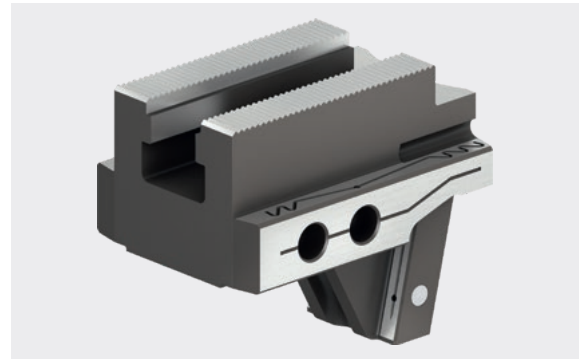
The jaw stroke display is an additional safety feature, which ensures safe workpiece clamping and simplifies the use of the chuck in daily operation.

1 Jaw stroke display

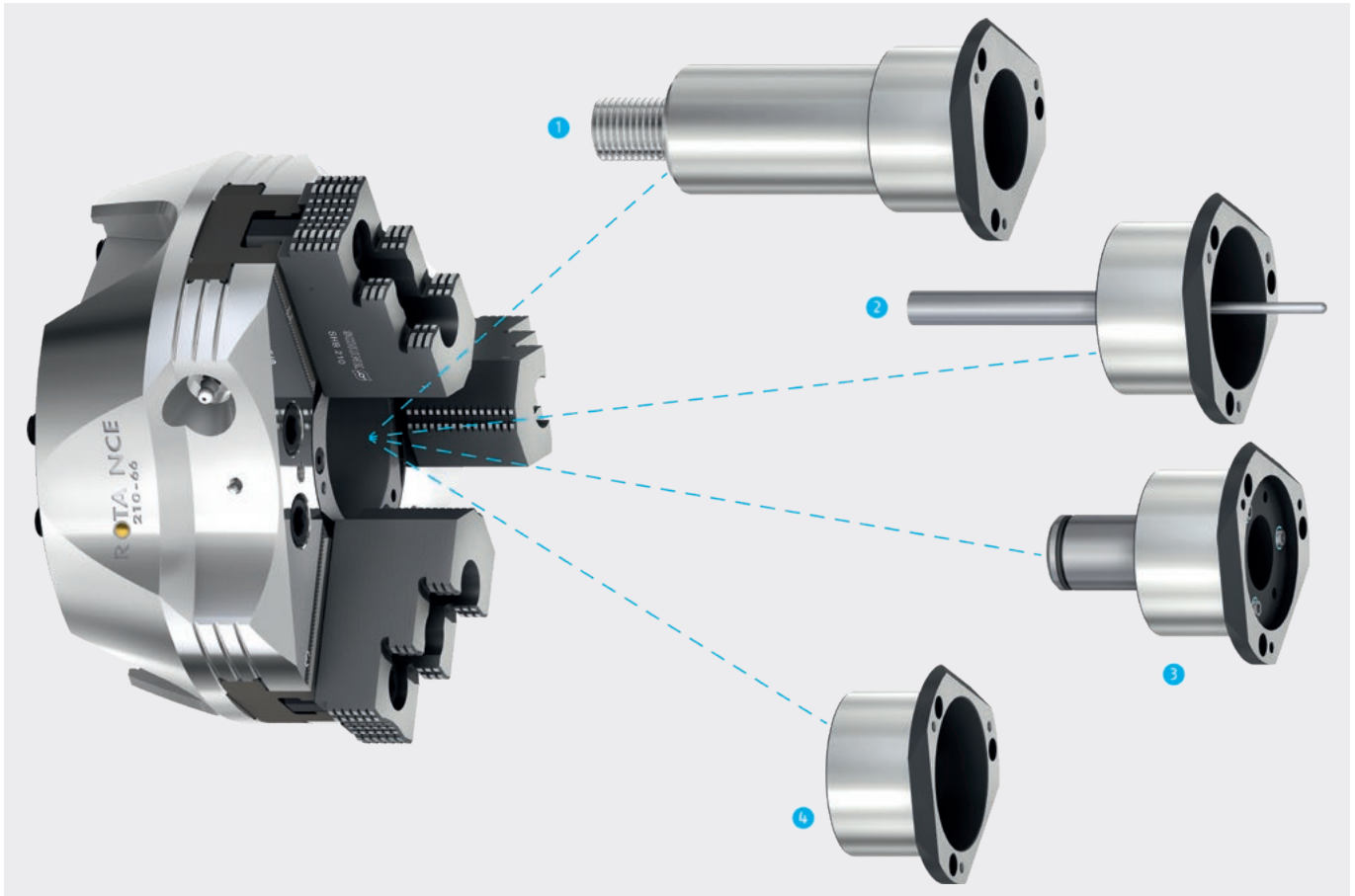


Absolute flexibility of the base jaw

Select between three standard jaw interfaces 1/16" x 90°, 1.5 mm x 60°, or tongue and groove with the advantage of being able to continue using your existing top jaws on the new SCHUNK chuck.



Modular center sleeve system



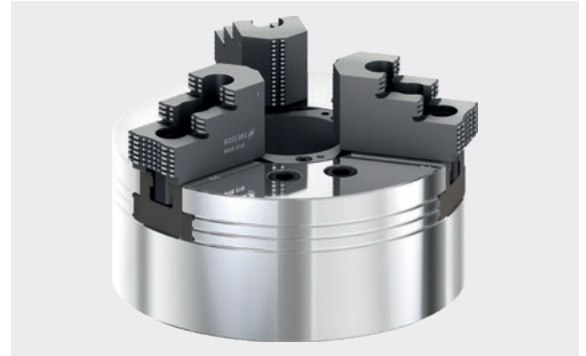
The modular center sleeve system increases flexibility for the most various applications in everyday life.

- 1 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.
- 2 Part ejector in the center sleeve**
An optimum addition for automatic loading. The part ejector disposes of a gas spring, which will eject your workpiece safely out of the chuck.
- 3 Coolant nozzles in the center sleeve**
Ideal as an additional component if your machine is equipped with a central coolant supply. For I.D. machining, coolant will be fed directly to the tool.
- 4 Closed center sleeve**
The closed center sleeve prevents penetration of chips and coolant into the through-hole.

Weight-optimized power lathe chuck ROTA NCE

Initial situation

The starting point for today's ROTA NCE was a traditional power lathe chuck with through-hole. This chuck represented the constructive volume for the finite element (FE) model, which was modified by optimization until the desired volume and weight reductions were achieved.



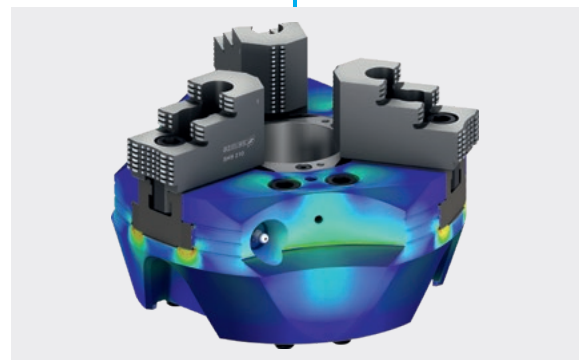
FE topology optimization

In the first step, FE topology optimization was used to calculate the lightest chuck design from the force flow, in which maximum stiffness is achieved.



FE parameter optimization

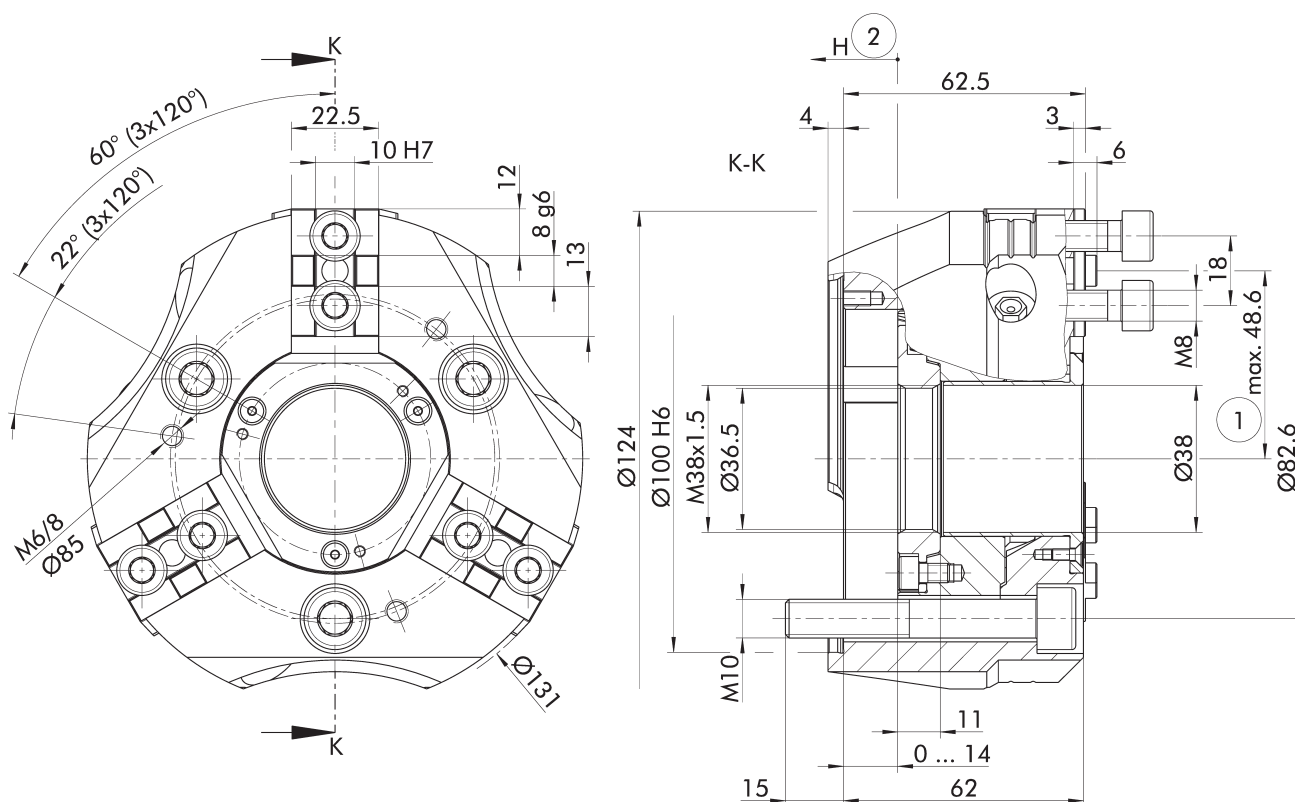
In the second step, FE parameter optimization was used to optimize the design of the highly loaded notch geometries in such a way that minimum notch stresses and maximum stiffness values could be achieved.



Result

The optimization process resulted in the current ROTA NCE, in which a computer-based adjustment of the chuck geometry to the prevailing force flow reduced the mass and the mass moment of inertia by up to 40% respectively – while maintaining the rigidity of the chuck.





Chuck for shaft clamping drawn in open position.
Subject to technical changes.

① Distance to center of tongue and groove

② Piston stroke direction

Technical data

Spindle type	Spindle size	ID	Serration	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Moment of inertia [kgm ²]	Weight [kg]
-	Z100	1334152	Tongue and groove	7500	45	19	0.009	4.1

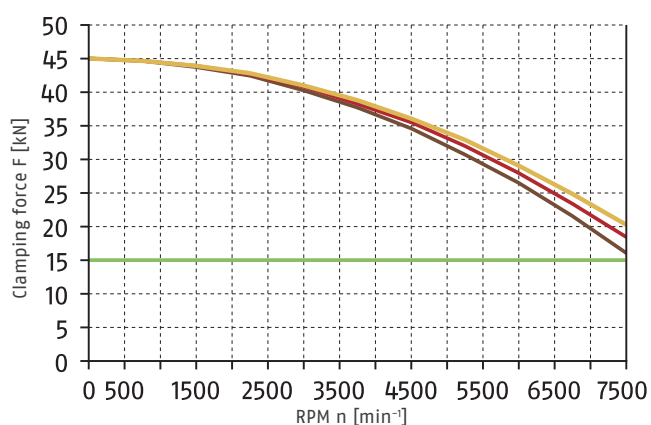
Scope of delivery

Chuck, T-nuts with screws, chuck mounting screws, mounting wrench for turnable threaded ring, center sleeve, and operating manual

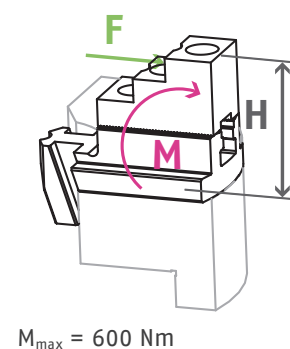
Further technical data

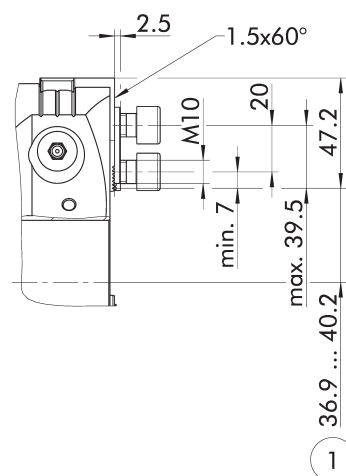
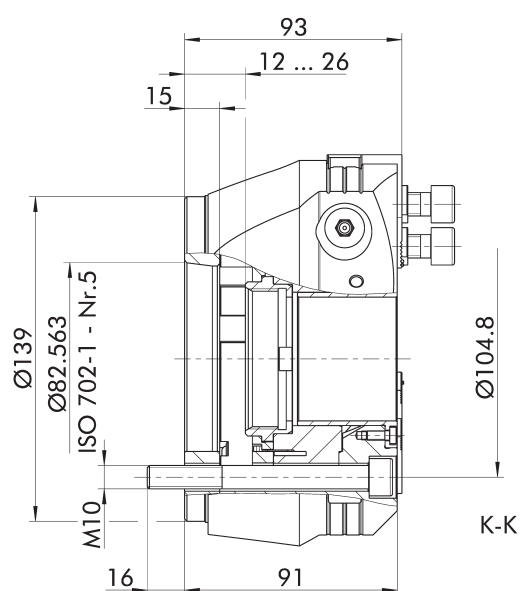
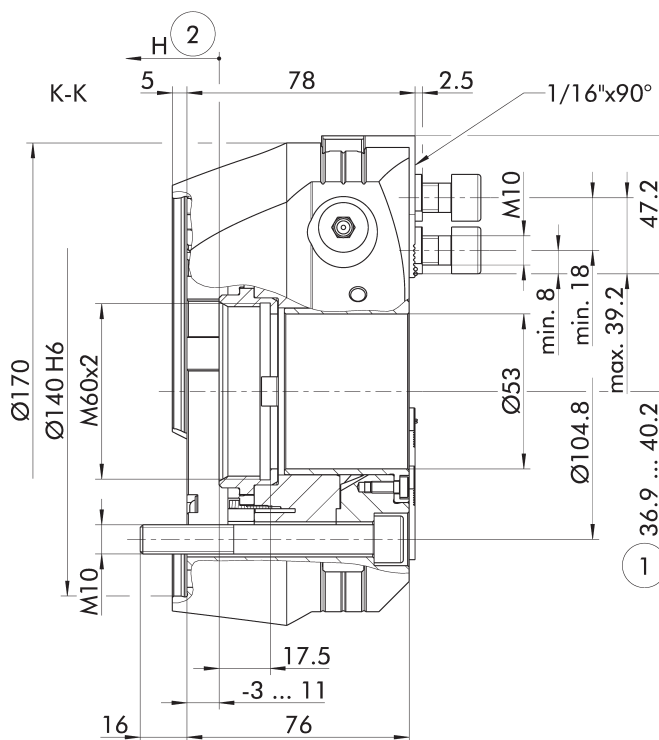
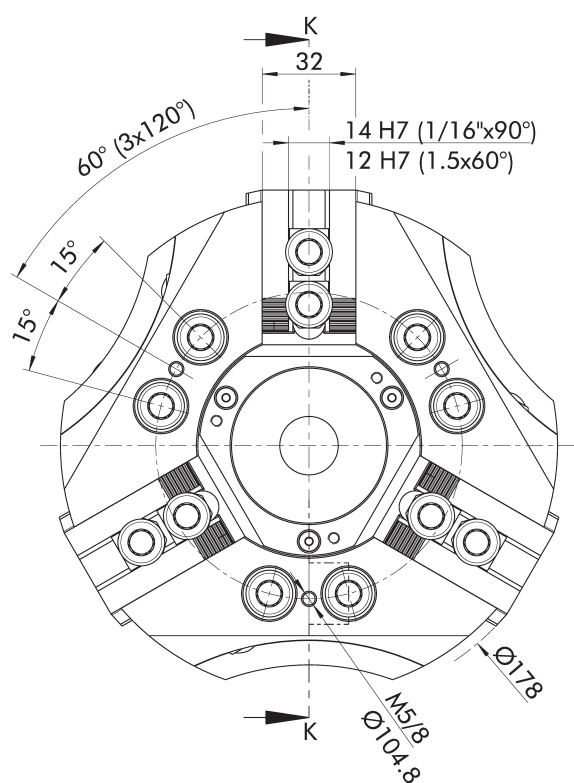
Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA NCE 130-38	38	3.2	14	40

Clamping force-RPM-diagram



Load of base jaw guidance





Chuck for shaft clamping drawn in open position.
Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

Spindle type	Spindle size	ID	Serration	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Moment of inertia [kgm ²]	Weight [kg]
ISO 702-4	Nr. 5 (Z140)	0808010	1/16" x 90°	6000	65	26	0.032	8.6
ISO 702-1	Nr. 5	0808011	1/16" x 90°	6000	65	26	0.035	9.7
ISO 702-4	Nr. 5 (Z140)	0808012	1.5 mm x 60°	6000	65	26	0.032	8.6
ISO 702-1	Nr. 5	0808013	1.5 mm x 60°	6000	65	26	0.035	9.7

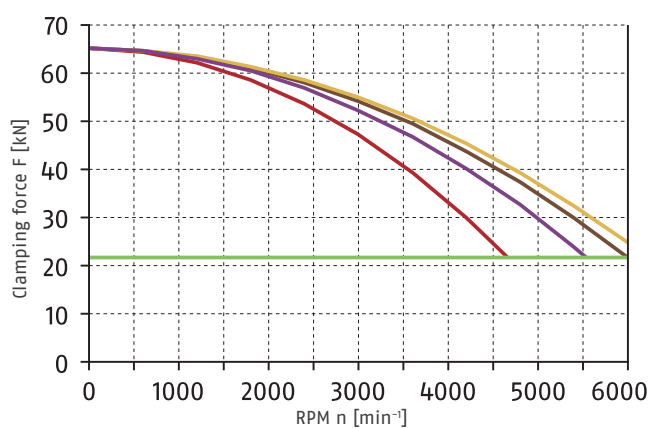
Scope of delivery

Chuck, T-nuts with screws, chuck mounting screws, mounting wrench for turnable threaded ring, center sleeve, and operating manual

Further technical data

Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA NCE 165-53	53	3.3	14	65.5

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

SHB 165
1.3 kg



SWB 165
2.5 kg



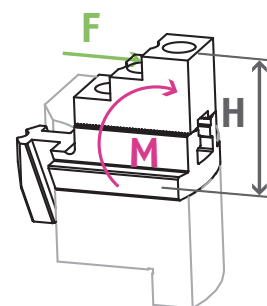
SHB-J 60
0.8 kg



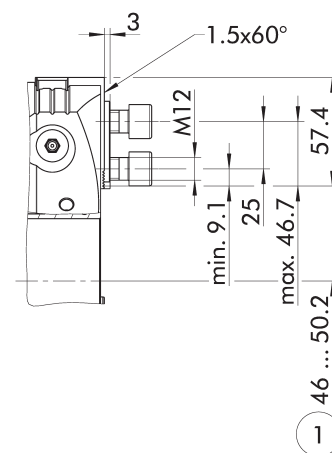
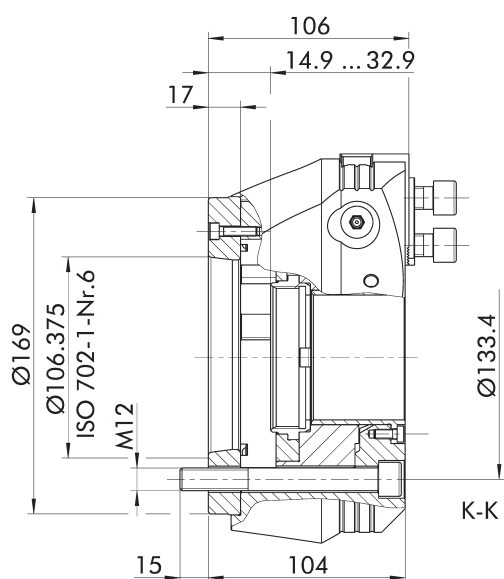
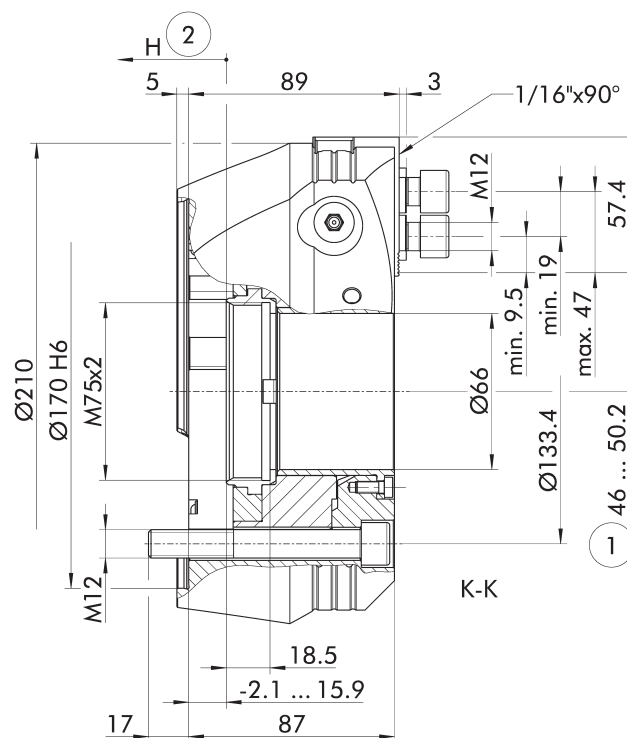
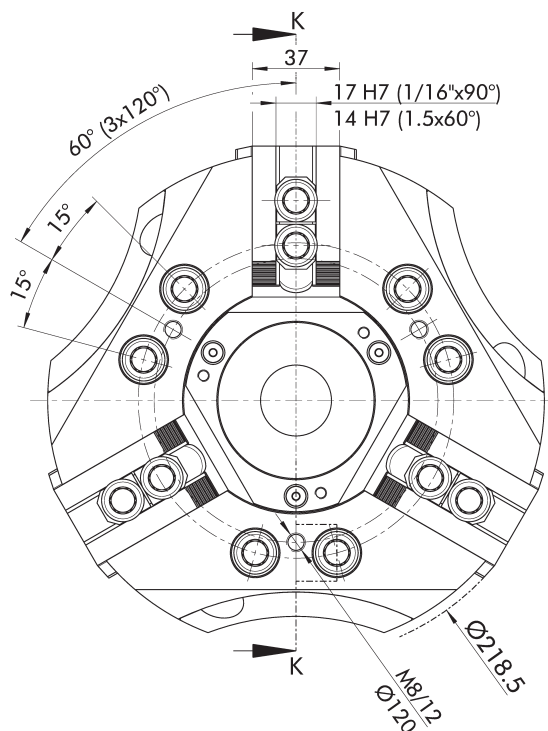
KM-WB 66
1.4 kg



Load of base jaw guidance



$$M_{max} = 1419 \text{ Nm}$$



Chuck for shaft clamping drawn in open position.
Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

Spindle type	Spindle size	ID	Serration	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Moment of inertia [kgm ²]	Weight [kg]
ISO 702-4	Nr. 6 (Z170)	0808020	1/16" x 90°	5000	100	38	0.08	15
ISO 702-1	Nr. 6	0808021	1/16" x 90°	5000	100	38	0.092	16.7
ISO 702-4	Nr. 6 (Z170)	0808022	1.5 mm x 60°	5000	100	38	0.08	15
ISO 702-1	Nr. 6	0808023	1.5 mm x 60°	5000	100	38	0.092	16.7

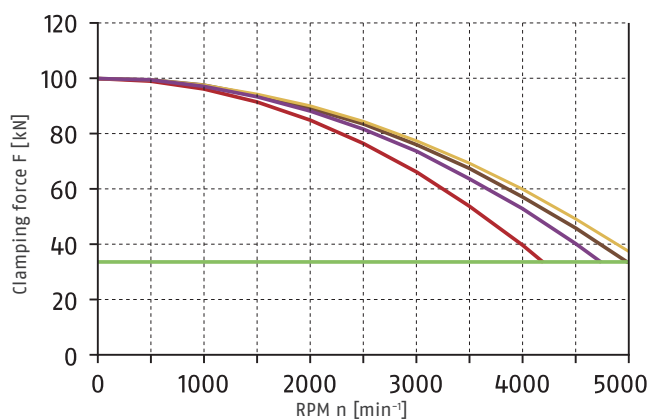
Scope of delivery

Chuck, T-nuts with screws, chuck mounting screws, mounting wrench for turnable threaded ring, center sleeve, eye bolt, and operating manual

Further technical data

Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA NCE 210-66	66	4.2	18	71.5

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

SHB 210
2 kg



SWB 200
4.1 kg



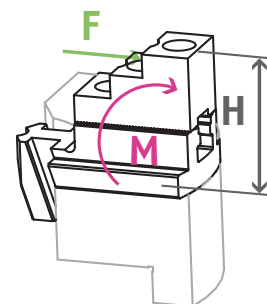
SHB-J 80
1.85 kg



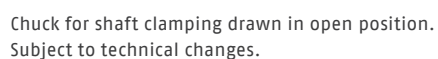
KM-WB 88
2.7 kg



Load of base jaw guidance



$$M_{max} = 2383 \text{ Nm}$$



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Technical data

Spindle type	Spindle size	ID	Serration	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Moment of inertia [kgm ²]	Weight [kg]
ISO 702-4	Nr. 8 (Z220)	0808030	1/16" x 90°	4500	130	45	0.195	24
ISO 702-1	Nr. 6	0808031	1/16" x 90°	4500	130	45	0.235	28.9
ISO 702-1	Nr. 8	0808032	1/16" x 90°	4500	130	45	0.22	26.5
ISO 702-4	Nr. 8 (Z220)	0808033	1.5 mm x 60°	4500	130	45	0.195	24
ISO 702-1	Nr. 6	0808034	1.5 mm x 60°	4500	130	45	0.235	28.9
ISO 702-1	Nr. 8	0808035	1.5 mm x 60°	4500	130	45	0.22	26.5

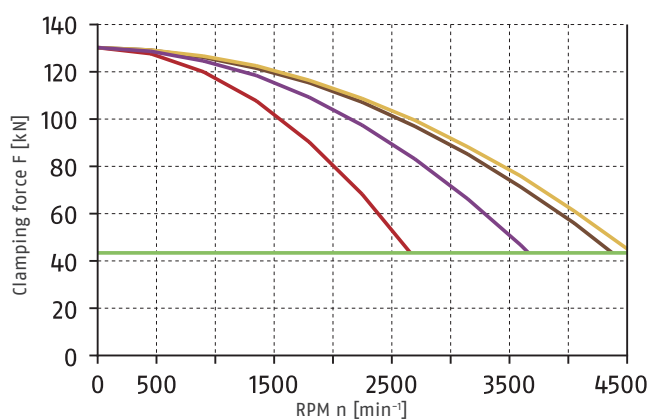
Scope of delivery

Chuck, T-nuts with screws, chuck mounting screws, mounting wrench for turnable threaded ring, center sleeve, eye bolt, and operating manual

Further technical data

Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA NCE 260-81	81	4.9	21	82

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

SHB 250
3.5 kg



SWB 250
9.2 kg



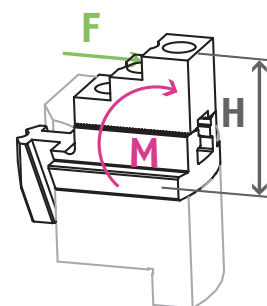
SHB-J 100
2.8 kg



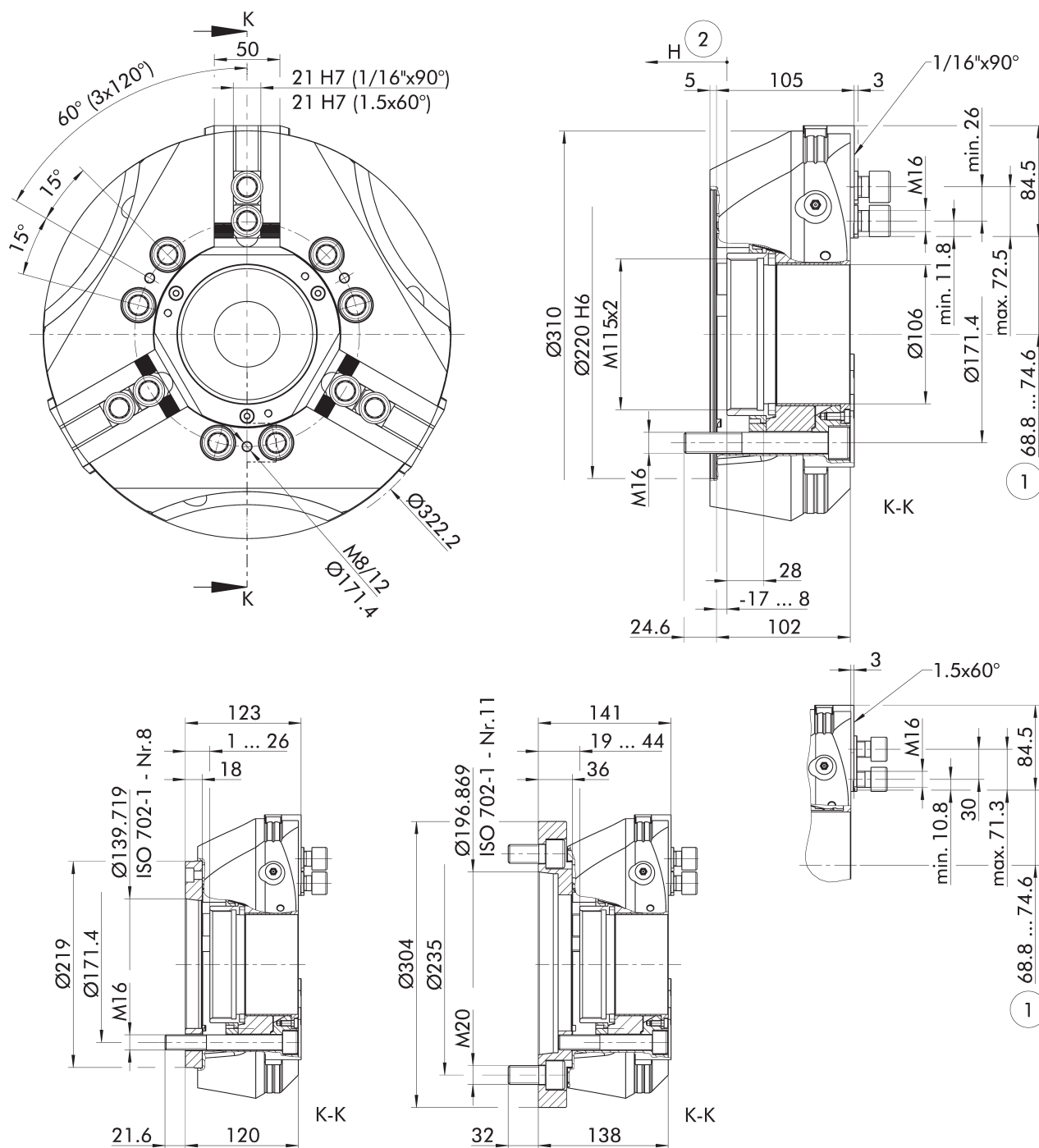
KM-WB 110
3.8 kg



Load of base jaw guidance



$$M_{\max} = 3553 \text{ Nm}$$



Chuck for shaft clamping drawn in open position.
Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

Spindle type	Spindle size	ID	Serration	Max. rotational speed [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Moment of inertia [kgm ²]	Weight [kg]
ISO 702-4	Nr. 8 (Z220)	0808040	1/16" x 90°	3500	155	58	0.44	37.7
ISO 702-1	Nr. 8	0808042	1/16" x 90°	3500	155	58	0.465	40.6
ISO 702-1	Nr. 11	0808043	1/16" x 90°	3500	155	58	0.62	49.8
ISO 702-4	Nr. 8 (Z220)	0808044	1.5 mm x 60°	3500	155	58	0.44	37.7
ISO 702-1	Nr. 8	0808046	1.5 mm x 60°	3500	155	58	0.465	40.3
ISO 702-1	Nr. 11	0808047	1.5 mm x 60°	3500	155	58	0.62	49.8

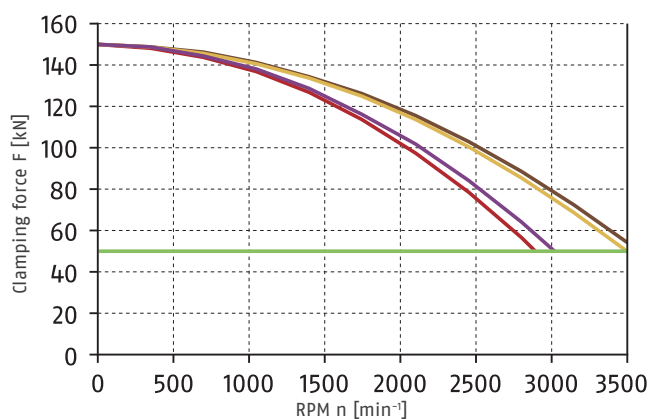
Scope of delivery

Chuck, T-nuts with screws, chuck mounting screws, mounting wrench for turnable threaded ring, center sleeve, eye bolt, and operating manual

Further technical data

Chuck type	Through-hole [mm]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA NCE 315-106	106	5.8	25	82.5

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

SHB 250
3.5 kg



SWB 250
9.2 kg



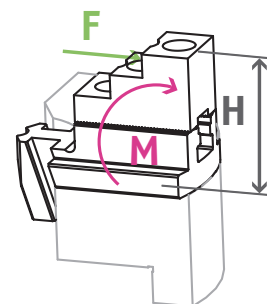
SHB-J 126
5.15 kg



KM-WB 126
7.56 kg



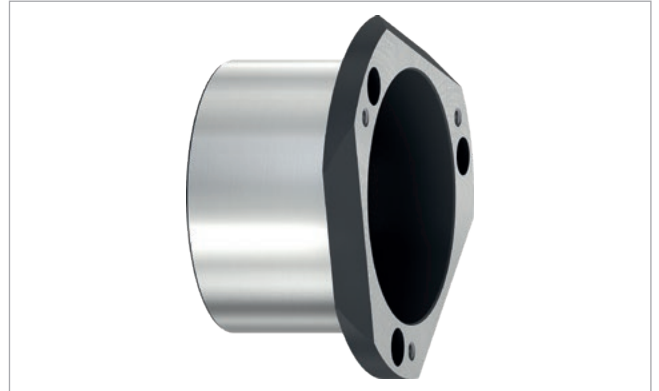
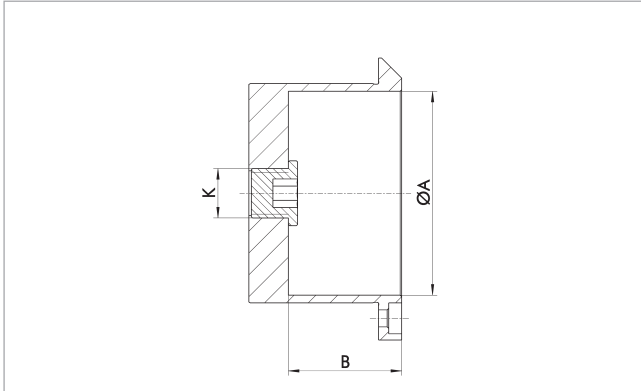
Load of base jaw guidance



$$M_{max} = 4263 \text{ Nm}$$

Center sleeves

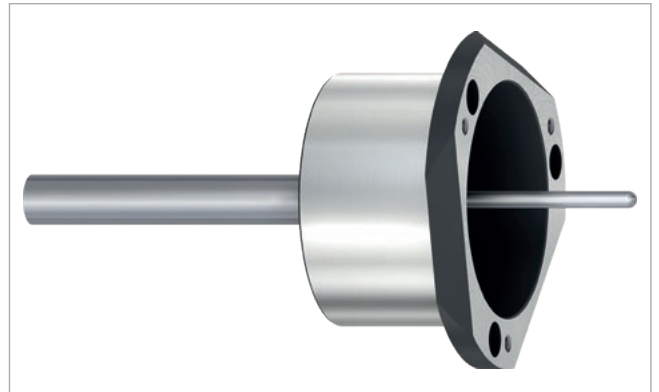
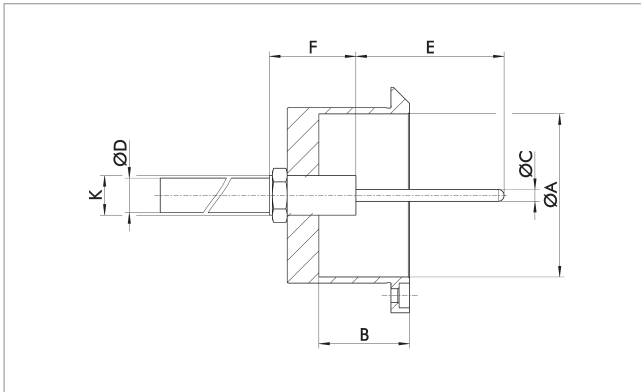
Center sleeve closed



Technical data

Description	ID	Suitable for	ØA [mm]	B [mm]	K	Weight [kg]
SBS-G-E 165	1300320	ROTA NCE 165-53	53	29.9	M16x1.5	0.4
SBS-G-E 210	1311442	ROTA NCE 210-66	66	36.7	M16x1.5	0.7
SBS-G-E 260	1300322	ROTA NCE 260-81	81	39	M16x1.5	1
SBS-G-E 315	1344113	ROTA NCE 315-106	104	44	M16x1.5	1.6

Protection sleeve with ejector

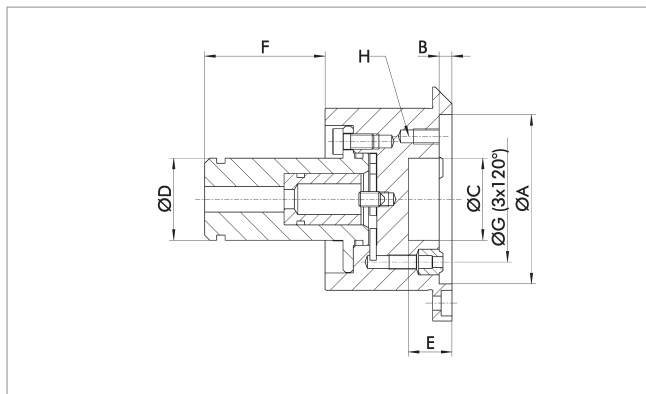


Technical data

Description	Suitable for	ØA [mm]	B [mm]	ØC [mm]	ØD [mm]	E [mm]	F [mm]	K
SBS-A-E 165	ROTA NCE 165-53	53	29.9	4.8	14	10 - 100	35	M16x1.5
SBS-A-E 210	ROTA NCE 210-66	66	36	4.8	14	10 - 100	35	M16x1.5
SBS-A-E 260	ROTA NCE 260-81	81	39	4.8	14	10 - 100	35	M16x1.5
SBS-A-E 315	ROTA NCE 315-106	104	44	4.8	14	10 - 100	35	M16x1.5

- Center sleeves with ejector are available on request
- The ejector stroke is selectable in increments of 10 from 10 - 100 mm
- The ejection force is selectable with 40, 100, 150, 200, 250, or 300 N

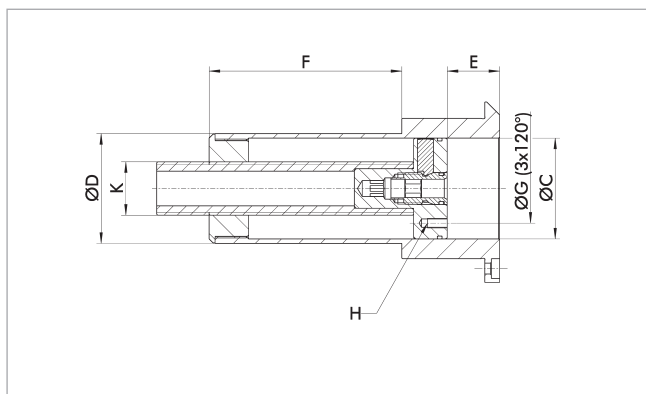
Protection sleeve with spray nozzles



Technical data

Description	ID	Suitable for	ØA [mm]	B [mm]	ØC [mm]	ØD [mm]	F [mm]	ØG [mm]	H	Weight [kg]
SBS-S-E 165	1300316	ROTA NCE 165-53	53	5	25	32	34	39	M6x10	0.9
SBS-S-E 210	1311440	ROTA NCE 210-66	66	5	32	32	47	49	M6x10	1.6
SBS-S-E 260	1300317	ROTA NCE 260-81	81	5	48	32	47	67	M6x10	2.2
SBS-S-E 315	1344115	ROTA NCE 315-106	104	5	70	32	47	85	M6x10	

Center sleeve with adjustable stop



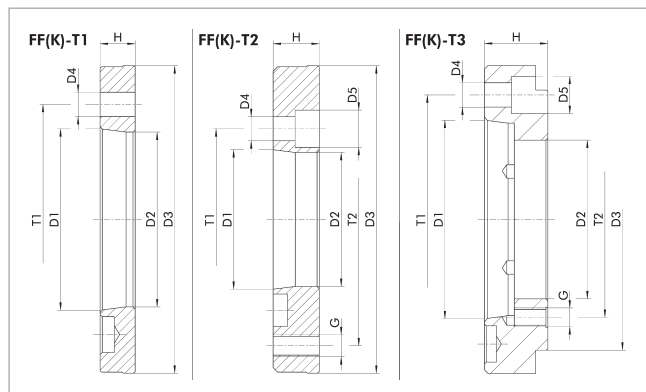
Technical data

Description	ID	Suitable for	ØC [mm]	ØD [mm]	E [mm]	F [mm]	ØG [mm]	H	K	Weight [kg]
SBS-T-E 165	1300323	ROTA NCE 165-53	42	46.5	0 - 110	104.5	30	M4x8	M27	1.4
SBS-T-E 210	1311441	ROTA NCE 210-66	51	55.5	0 - 110	97.5	35	M5x10	M27	2.1
SBS-T-E 260	1300324	ROTA NCE 260-81	61	65.5	0 - 110	95	40	M5x10	M27	2.9
SBS-T-E 315	1344116	ROTA NCE 315-106	75	80.5	0 - 110	104.5	50	M6x12	M27	4.6

- Important: Check the spindle/draw tube through-hole
- The spindle through-hole must be at least $\varnothing D + 0.5$ mm

Adapter plates

Z-mount on short taper ISO 702-1



Technical data

Description	Adapter plate type	ID	Suitable for	D1	D2	D3	D4	D5	G	H	T1	T2
					[mm]		[mm]	[mm]		[mm]	[mm]	[mm]
FF-T1 Z100-A4	FF-T1	0803010	ROTA NCE 130-38	Nr. 4	61	Z100	11 (6x60°)			12	82.6	
FF-T3 Z100-A5	FF-T3	0801008	ROTA NCE 130-38	Nr. 5	66	Z100	11 (6x60°)	17	M10 (6x60°)	30	104.8	82.6
FFK-T1 Z140-A5	FF-T1	0805120	ROTA NCE 165-53	Nr. 5	79.6	Z140	12 (6x60°)			15	104.8	
FFK-T3 Z140-A6	FF-T3	0805115	ROTA NCE 165-53	Nr. 6	80	Z140	13 (6 x 60°)	20	M10 (6x60°)	34	133.4	104.8
FFK-T2 Z170-A5	FF-T2	0805109	ROTA NCE 210-66	Nr. 5	79.6	Z170	11 (6x60°)	17	M12 (6x60°)	25	104.8	133.4
FFK-T1 Z170-A6	FF-T1	0805102	ROTA NCE 210-66	Nr. 6	103.2	Z170	14 (6x60°)			17	133.4	
FFK-T3 Z170-A8	FF-T3	0805111	ROTA NCE 210-66	Nr. 8	110	Z170	17 (6x60°)	26	M12 (6x60°)	40	171.4	133.4
FFK-T2 Z220-A5	FF-T2	0805113	ROTA NCE 260-81	Nr. 5	79.6	Z220	11 (6x60°)	17	M16 (6x60°)	28	104.8	171.4
FFK-T2 Z220-A6	FF-T2	0805122	ROTA NCE 260-81	Nr. 6	103.2	Z220	11 (3x120°)		M16 (6x60°)			
FFK-T1 Z220-A8	FF-T1	0805123	ROTA NCE 315-106	Nr. 6	103.2	Z220	14 (6x60°)	20	M16 (3x120°)	25	133.4	171.4
FFK-T3 Z220-A11	FF-T3	0805121	ROTA NCE 315-106	Nr. 8	136.2	Z220	18 (6x60°)			18	171.4	
FFK-T1 Z220-A8	FF-T1	0805124	ROTA NCE 260-81	Nr. 8	136.2	Z220	18 (3x120°)					
FFK-T3 Z220-A11	FF-T3	0805121	ROTA NCE 260-81	Nr. 11	148	Z220	21 (6x60°)	32	M16 (6x60°)	36	235	171.4
FFK-T1 Z220-A8	FF-T1	0805124	ROTA NCE 315-106	Nr. 8	136.2	Z220	18 (6x60°)			18	171.4	

Direct adapter plates

Direct adapter plates are used if the spindle mounting bolt circle has the same size as the lathe chuck mounting bolt circle. The adapter plate has to be mounted on to the spindle together with the lathe chuck. The adapter plate is preassembled on the lathe chuck.

Reduction adapter plates FF-T2

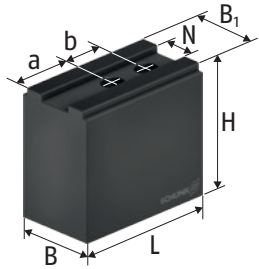
Reduction adapter plates are used if the mounting bolt circle of the spindle is smaller than the one of the lathe chuck mounting bolt circle. The adapter plate is first mounted on the spindle and then the lathe chuck is mounted on the adapter plate.

Expansion adapter plates FF-T3

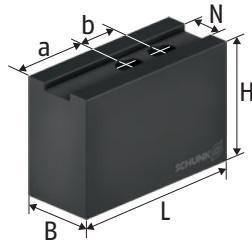
Expansion adapter plates are used if the mounting bolt circle of the spindle is larger than the one of the lathe chuck mounting bolt circle. The adapter plate is first mounted on the spindle and then the lathe chuck is mounted on the adapter plate.

Soft top jaws

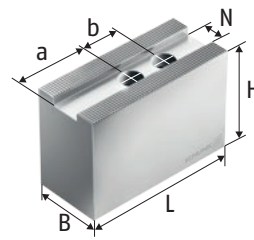
with fine serration 60°



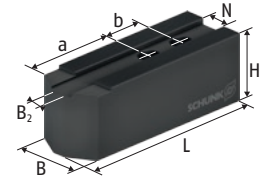
SKN
Soft top jaws



KM-WB
Soft top jaws



KM-WBAL
Soft top jaws



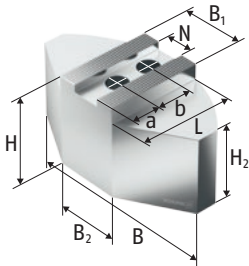
KM-WBL
Soft top jaws

Technical data

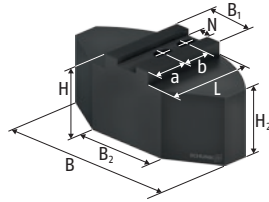
Chuck type	Description	ID	N [mm]	B [mm]	B1 [mm]	H [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA NCE 165-53	KM-WBL 60	0132600	12	32		32	82	47	20	M10	1.5
ROTA NCE 165-53	KM-WBL 62	0132606	12	35		60	82	47	20	M10	3.1
ROTA NCE 165-53	KM-WB 61	0130128	12	35		60	72	37	20	M10	2.9
ROTA NCE 165-53	KM-WB 66	0132138	12	32		32	72	37	20	M10	1.4
ROTA NCE 165-53	KM-WBAL 70	0132521	12	35		50	72	37	20	M10	0.9
ROTA NCE 210-66	KM-WBL 80	0132601	14	35		40	102	57	25	M12	2.7
ROTA NCE 210-66	KM-WBL 81	0132607	14	40		80	102	57	25	M12	6.0
ROTA NCE 210-66	KM-WBL 82	0132615	14	40		100	102	57	25	M12	7.6
ROTA NCE 210-66	KM-WB 84	0132126	14	35		60	95	46	25	M12	3.9
ROTA NCE 210-66	KM-WB 85	0132127	14	40		80	95	46	25	M12	6.1
ROTA NCE 210-66	KM-WB 88	0132139	14	35		40	95	46	25	M12	2.7
ROTA NCE 210-66	KM-WBAL 80	0132522	14	40		60	90	45	25	M12	1.5
ROTA NCE 260-81	KM-WBL 100	0132602	16	40		42	125	65	30	M12	4.1
ROTA NCE 260-81	KM-WBL 101	0132608	16	40		100	125	65	30	M12	9.8
ROTA NCE 260-81	KM-WBL 103	0132609	16	40		60	125	65	30	M12	5.7
ROTA NCE 260-81	KM-WB 102	0132104	16	40		60	90	45	30	M12	4.3
ROTA NCE 260-81	KM-WB 103	0132105	16	40		60	110	50	30	M12	5.2
ROTA NCE 260-81	KM-WB 104	0132106	16	50		80	90	45	30	M12	7.3
ROTA NCE 260-81	KM-WB 105	0132129	16	40		80	110	50	30	M12	7.2
ROTA NCE 260-81	KM-WB 106	0132152	16	40		100	120	60	30	M12	9.7
ROTA NCE 260-81	KM-WB 110	0132140	16	40		42	110	50	30	M12	3.8
ROTA NCE 260-81	KM-WB 111	0132147	16	50		50	120	60	30	M12	6.2
ROTA NCE 260-81	KM-WBAL 100	0132523	16	40		60	110	55	30	M12	1.9
ROTA NCE 315-106	KM-WBL 121	0132604	21	50		50	145	85	30	M16	6.9
ROTA NCE 315-106	KM-WBL 125	0132618	21	50		100	145	85	30	M16	13.9
ROTA NCE 315-106	H-WB 125	0130124	21	50		60	111	51	35	M16	6.2
ROTA NCE 315-106	KM-WB 126	0132131	21	50		60	129	60	30	M16	7.6
ROTA NCE 315-106	KM-WB 127	0132148	21	50		100	140	71	30	M16	13.8
ROTA NCE 315-106	KM-WB 128	0132154	21	50		80	129	60	30	M16	10.1
ROTA NCE 315-106	KM-WBAL 121	0132525	21	50		80	130	60	30	M16	3.8
ROTA NCE 315-106	SKN 350	0127107	21	50	49	80	120	67	28	M16	9.1

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

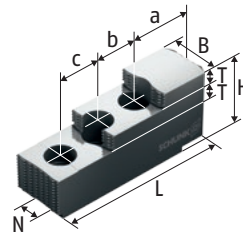
Hard stepped top jaws, Full grip jaws with fine serration 60°



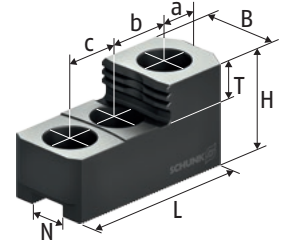
KMWB-SA
Full grip jaws



KMWB-SM
Full grip jaws



SHB-J
Hard stepped top jaws



SHB-J
Hard stepped top jaws

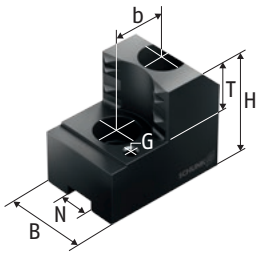
Technical data

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 NCE 165-53	KMWB-SA 165	0132800	12	120	32	58	48	59.5		25	20		M10	2.2
ROTA NCE 165-53	KMWB-SM 165	0132700	12	120	32	50	40	60		24	20		M10	4.9
ROTA NCE 165-53	SHB-J 60	0133100	12	28		36		67	12	14	20	20	M10	0.8
ROTA NCE 210-66	KMWB-SA 210	0132801	14	140	35	58	48	72.5		35	25		M12	3.1
ROTA NCE 210-66	KMWB-SA 211	0132805	14	140	35	80	70	72.5		35	25		M12	4.5
ROTA NCE 210-66	KMWB-SM 210	0132701	14	140	35	60	50	70		30	25		M12	8.8
ROTA NCE 210-66	KMWB-SM 211	0132705	14	140	35	80	70	70		30	25		M12	12.3
ROTA NCE 210-66	SHB-J 80	0133109	14	35		51		87	12	15.5	25	25	M12	1.8
ROTA NCE 210-66	SHB-J 82	0133110	14	32		38		79	12	16	25	25	M12	1.2
ROTA NCE 260-81	KMWB-SA 250	0132802	16	180	40	58	43	87.5		40	30		M12	4.5
ROTA NCE 260-81	KMWB-SA 251	0132806	16	180	40	80	65	87.5		40	30		M12	6.6
ROTA NCE 260-81	KMWB-SM 250	0132702	16	180	40	60	45	80		29	30		M12	12.0
ROTA NCE 260-81	KMWB-SM 251	0132706	16	180	40	80	70	80		29	30		M12	18.0
ROTA NCE 260-81	SHB-J 100	0133111	16	40		54		101.5	13	25.5	30	30	M12	2.8
ROTA NCE 315-106	KMWB-SA 301	0132804	21	240	50	78	63	117		45	30		M16	10.9
ROTA NCE 315-106	KMWB-SM 301	0132704	21	240	50	70	55	110		45	30		M16	26.4
ROTA NCE 315-106	SHB-J 126	0133105	21	50		62		128	14	46	30	30	M16	5.2
ROTA NCE 315-106	SHB-J 122	0133113	21	50		52		104	18	20	30	30	M16	3.3

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Claw jaws

with fine serration 60°



SZAJ
Claw jaws

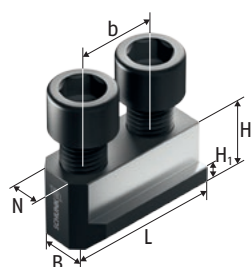
Technical data

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 NCE 165-53	36 - 61	186	SZAJ 16-6	0176100	12	30	47	71	20	M6	20	M10	1.2
ROTA NCE 165-53	51 - 77	185	SZAJ 16-7	0176101	12	30	47	62.5	20	M6	20	M10	1.0
ROTA NCE 165-53	67 - 93	185	SZAJ 16-8	0176102	12	30	47	54	20	M6	20	M10	1.1
ROTA NCE 165-53	81 - 107	186	SZAJ 16-9	0176103	12	30	47	52.5	20	M6	20	M10	1.1
ROTA NCE 165-53	97 - 123	187	SZAJ 16-10	0176104	12	40	47	52.5	20	M6	20	M10	1.2
ROTA NCE 210-66	44 - 71	221	SZAJ 20-1	0138110	14	35	53	83	25	M6	25	M12	1.9
ROTA NCE 210-66	71 - 99	222	SZAJ 20-2	0138112	14	35	53	72.5	25	M6	25	M12	1.6
ROTA NCE 210-66	102 - 129	221	SZAJ 20-3	0138114	14	40	53	64.5	25	M6	25	M12	1.7
ROTA NCE 210-66	132 - 160	223	SZAJ 20-4	0138116	14	40	53	60	25	M6	25	M12	1.6
ROTA NCE 210-66	153 - 182	240	SZAJ 20-16	0138143	14	40	53	69	25	M6	25	M12	1.9
ROTA NCE 260-81	47 - 91	271	SZAJ 25-1	0138117	16	40	58	99.5	25	M6	30	M12	2.9
ROTA NCE 260-81	88 - 133	273	SZAJ 25-2	0138119	16	40	58	81	25	M6	30	M12	2.3
ROTA NCE 260-81	132 - 178	277	SZAJ 25-3	0138121	16	40	58	70.5	25	M6	30	M12	2.1
ROTA NCE 260-81	177 - 223	290	SZAJ 25-4	0138123	16	40	58	75	25	M6	30	M12	2.3
ROTA NCE 260-81	212 - 258	322	SZAJ 25-15	0138118	16	40	58	94.5	25	M6	30	M12	2.8
ROTA NCE 315-106	62 - 129	344	SZAJ 30-5	0138131	21	50	65	120	25	M8	30	M16	3.8
ROTA NCE 315-106	122 - 188	358	SZAJ 30-6	0138132	21	50	65	100.5	25	M8	30	M16	4.1
ROTA NCE 315-106	188 - 255	347	SZAJ 30-7	0138133	21	50	65	79.5	25	M8	30	M16	3.4
ROTA NCE 315-106	252 - 320	391	SZAJ 30-8	0138134	21	50	65	109.5	25	M8	30	M16	4.8

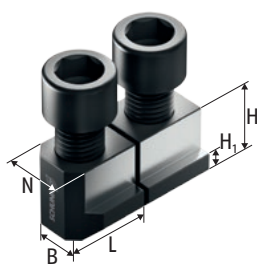
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

T-nut

with fine serration 60°



NJ
T-nut



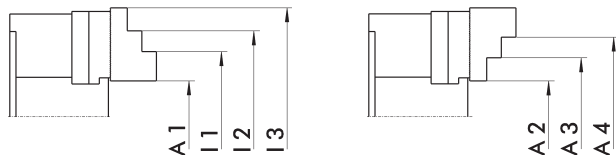
NJ sawn
T-nut

Chuck type	Description	ID	N	B	H	H1	L	b	Cyl.-screw	Max. adm. tightening torque
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
ROTA NCE 165-53	NJ 62	0146133	12	17.3	18.5	7.5	35.7	20	M10 x 25	50
ROTA NCE 210-66	NJ 82 gesägt/sawn	0146005	14	20.3	20.5	8.5	20.5		M12 x 30	70
ROTA NCE 210-66	NJ 82	0146131	14	20.3	20.5	8.5	46.2	25	M12 x 30	70
ROTA NCE 260-81	NJ 103 gesägt/sawn	0146002	16	22.4	21.5	8.5	22.7		M12 x 30	70
ROTA NCE 260-81	NJ 103	0146132	16	22.4	21.5	8.5	50.7	30	M12 x 30	70
ROTA NCE 315-106	NJ 124 gesägt/sawn	0146000	21	29.4	28	11.5	24.7		M16 x 40	150
ROTA NCE 315-106	NJ 124	0146123	21	29.4	28	11.5	55.2	30	M16 x 40	150

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Hard stepped top jaws

with fine serration 60°



Jaw position I

Jaw position II

O.D. clamping

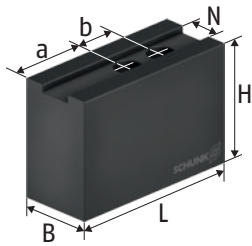
Chuck type	Description	ID	A1 [mm]	A4 [mm]	A2 [mm]	A3 [mm]
ROTA NCE 165-53	SHB-J 60	0133100	23 - 87	101 - 170		
ROTA NCE 210-66	SHB-J 80	0133109	35 - 105	137 - 210	25 - 98	87 - 160
ROTA NCE 210-66	SHB-J 82	0133110	33 - 107		131 - 202	
ROTA NCE 260-81	SHB-J 100	0133111	19 - 127	160 - 254	40 - 130	126 - 164
ROTA NCE 315-106	SHB-J 126	0133105	20 - 142	247 - 310	63 - 159	155 - 251

I.D. clamping

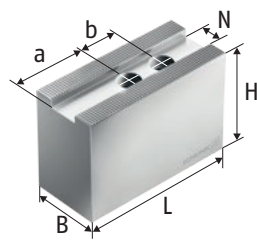
Chuck type	Description	ID	I1 [mm]	I2 [mm]	I3 [mm]
ROTA NCE 165-53	SHB-J 60	0133100	79 - 145		
ROTA NCE 210-66	SHB-J 80	0133109	100 - 168	149 - 218	209 - 279
ROTA NCE 210-66	SHB-J 82	0133110	104 - 176		
ROTA NCE 260-81	SHB-J 100	0133111	103 - 141	137 - 225	220 - 325
ROTA NCE 315-106	SHB-J 126	0133105	89 - 186	181 - 277	273 - 380

Soft top jaws

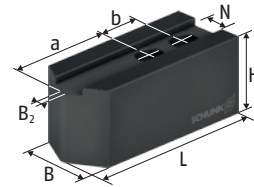
with fine serration 90°



SWB
Soft top jaws



SWB-AL
Soft top jaws



SWBL
Soft top jaws

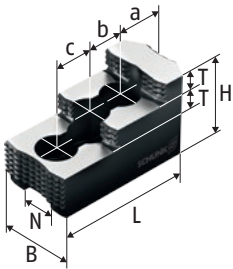
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA NCE 165-53	SWBL 165	0120152	14	35	40	80	45	20	M10	2.1
ROTA NCE 165-53	SWB 165	0120101	14	35	60	68	33	20	M10	2.5
ROTA NCE 165-53	SWB-FF 160	0120302	14	35	40	72	36	21	M12	1.8
ROTA NCE 165-53	SWB-AL 165	0168105	14	35	60	80	45	20	M10	1.2
ROTA NCE 210-66	SWBL 200	0120153	17	35	40	98	61	22	M12	2.6
ROTA NCE 210-66	CWB 200	0100006	17	40	40	90	43	22	M12	2.7
ROTA NCE 210-66	SWB 200	0120104	17	40	60	90	43	22	M12	4.1
ROTA NCE 210-66	FR-AL 200	0120602	17	40	60	90	59	19	M12	1.6
ROTA NCE 210-66	SWB-AL 200	0168101	17	40	60	90	43	22	M12	1.5
ROTA NCE 260-81	SWBL 250-21	0120155	21	50	50	120	72	28	M16	5.4
ROTA NCE 260-81	SWBL 315	0120156	21	50	50	140	82	28	M16	6.5
ROTA NCE 260-81	CWB 251	0100012	21	50	60	95	52	28	M16	5.2
ROTA NCE 260-81	SWB 250	0120105	21	50	80	120	62	28	M16	9.2
ROTA NCE 260-81	SWB-FR 315	0120406	21	50	60	105	65	25	M16	6.0
ROTA NCE 260-81	SWB-AL 250	0168102	21	50	80	120	62	28	M16	3.3
ROTA NCE 315-106	SWBL 250-21	0120155	21	50	50	120	72	28	M16	5.4
ROTA NCE 315-106	SWBL 315	0120156	21	50	50	140	82	28	M16	6.5
ROTA NCE 315-106	CWB 251	0100012	21	50	60	95	52	28	M16	5.2
ROTA NCE 315-106	SWB 250	0120105	21	50	80	120	62	28	M16	9.2
ROTA NCE 315-106	SWB-FR 315	0120406	21	50	60	105	65	25	M16	6.0
ROTA NCE 315-106	SWB-AL 250	0168102	21	50	80	120	62	28	M16	3.3

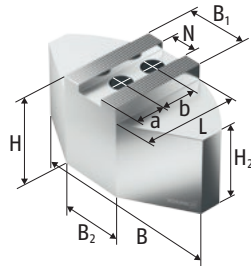
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on [schunk.com](https://www.schunk.com)

Hard stepped top jaws, Full grip jaws

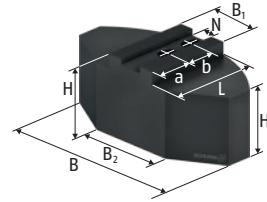
with fine serration 90°



SHB
Hard stepped top jaws



SWB-SA
Full grip jaws



SWB-SM
Full grip jaws

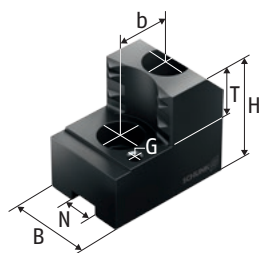
Technical data

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 NCE 165-53	SWB-SA 165	0170099	14	120	40	58	48	59.5		25	20		M10	2.2
ROTA NCE 165-53	SWB-SM 165	0169099	14	120	40	60	50	59.5		24.5	20		M10	6.0
ROTA NCE 165-53	SHB 165	0121101	14	30		46		79.7	11	16.6	22	22	M10	1.3
ROTA NCE 210-66	SWB-SA 200	0170101	17	140	40	58	48	72.5		35	22		M12	3.1
ROTA NCE 210-66	SWB-SA 201	0170106	17	140	40	75	65	72.5		35	22		M12	4.2
ROTA NCE 210-66	SWB-SM 200	0169101	17	140	40	60	50	69.5		35	22		M12	8.6
ROTA NCE 210-66	SWB-SM 201	0169106	17	140	40	75	65	69.5		35	22		M12	11.5
ROTA NCE 210-66	SHB 200	0121104	17	40		49		72.5	12	18	19	19	M12	1.6
ROTA NCE 210-66	SHB 210	0121102	17	40		49		84.3	12	28.7	19	19	M12	2.0
ROTA NCE 260-81	SWB-SA 250-21	0170103	21	180	50	78	63	87.5		40	28		M16	6.3
ROTA NCE 260-81	SWB-SA 251	0170107	21	180	50	100	85	87.5		40	28		M16	8.3
ROTA NCE 260-81	SWB-SA 315	0170104	21	240	50	78	63	117		70	28		M16	11.0
ROTA NCE 260-81	SWB-SM 250-21	0169103	21	180	50	70	55	80		29	28		M16	14.5
ROTA NCE 260-81	SWB-SM 251	0169107	21	180	50	100	85	80		30	28		M16	22.0
ROTA NCE 260-81	SWB-SM 315	0169104	21	240	50	70	55	110		60	28		M16	26.6
ROTA NCE 260-81	SHB 250	0121105	21	50		58		103.5	14	34	25	25	M16	3.5
ROTA NCE 260-81	SHB 315	0121111	21	50		58		128	14	46	30	30	M16	4.6
ROTA NCE 315-106	SWB-SA 250-21	0170103	21	180	50	78	63	87.5		40	28		M16	6.3
ROTA NCE 315-106	SWB-SA 251	0170107	21	180	50	100	85	87.5		40	28		M16	8.3
ROTA NCE 315-106	SWB-SA 315	0170104	21	240	50	78	63	117		70	28		M16	11.0
ROTA NCE 315-106	SWB-SM 250-21	0169103	21	180	50	70	55	80		29	28		M16	14.5
ROTA NCE 315-106	SWB-SM 251	0169107	21	180	50	100	85	80		30	28		M16	22.0
ROTA NCE 315-106	SWB-SM 315	0169104	21	240	50	70	55	110		60	28		M16	26.6
ROTA NCE 315-106	SHB 250	0121105	21	50		58		103.5	14	34	25	25	M16	3.5
ROTA NCE 315-106	SHB 315	0121111	21	50		58		128	14	46	30	30	M16	4.6

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Claw jaws

with fine serration 90°



SZA
Claw jaws

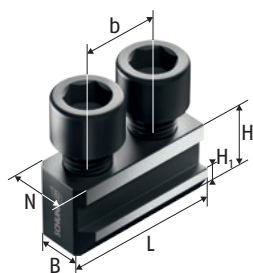
Technical data

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 NCE 165-53	36 - 59	182	SZA 17-1	0122260	14	30	47	71.5	20	M6	20	M10	1.2
ROTA NCE 165-53	58 - 81	183	SZA 17-2	0122261	14	30	47	61.9	20	M6	20	M10	1.0
ROTA NCE 165-53	85 - 108	184	SZA 17-3	0122262	14	30	47	58.7	20	M6	20	M10	1.0
ROTA NCE 165-53	111 - 134	192	SZA 17-4	0122263	14	35	47	60.3	20	M6	20	M10	1.2
ROTA NCE 210-66	38 - 69	223	SZA 20-14	0138195	17	35	50	85	25	M6	22	M12	1.8
ROTA NCE 210-66	65 - 97	223	SZA 20-15	0138196	17	35	50	72.9	25	M6	22	M12	1.5
ROTA NCE 210-66	94 - 126	224	SZA 20-16	0138197	17	40	50	65.1	25	M6	22	M12	1.5
ROTA NCE 210-66	120 - 152	224	SZA 20-17	0138198	17	40	50	66.7	25	M6	22	M12	1.6
ROTA NCE 210-66	152 - 184	249	SZA 20-18	0138199	17	40	50	71.4	25	M6	22	M12	1.8
ROTA NCE 210-66	35 - 66	238	SZA 25-6	0138176	17	35	55	97.7	25	M6	22	M12	2.3
ROTA NCE 210-66	156 - 190	257	SZA 25-9	0138179	17	40	55	81	25	M6	22	M12	2.4
ROTA NCE 260-81	60 - 98	271	SZA 25-37	0138180	21	50	58	95.9	25	M8	28	M16	3.3
ROTA NCE 260-81	100 - 138	271	SZA 25-38	0138181	21	50	58	81	25	M8	28	M16	2.9
ROTA NCE 260-81	149 - 188	274	SZA 25-39	0138182	21	50	58	76.2	25	M8	28	M16	2.7
ROTA NCE 260-81	196 - 235	309	SZA 25-40	0138183	21	50	58	90.5	25	M8	28	M16	3.2
ROTA NCE 260-81	46 - 75	280	SZA 31-10	0138184	21	50	58	115.4	25	M8	28	M16	3.4
ROTA NCE 260-81	224 - 263	340	SZA 31-13	0138187	21	50	58	111.1	25	M8	28	M16	4.7
ROTA NCE 315-106	84 - 155	328	SZA 25-37	0138180	21	50	58	95.9	25	M8	28	M16	3.3
ROTA NCE 315-106	124 - 195	328	SZA 25-38	0138181	21	50	58	81	25	M8	28	M16	2.9
ROTA NCE 315-106	174 - 245	331	SZA 25-39	0138182	21	50	58	76.2	25	M8	28	M16	2.7
ROTA NCE 315-106	221 - 292	367	SZA 25-40	0138183	21	50	58	90.5	25	M8	28	M16	3.2
ROTA NCE 315-106	62 - 133	338	SZA 31-10	0138184	21	50	58	115.4	25	M8	28	M16	3.4
ROTA NCE 315-106	120 - 190	339	SZA 31-11	0138185	21	50	58	92.1	25	M8	28	M16	3.4
ROTA NCE 315-106	185 - 256	338	SZA 31-12	0138186	21	50	58	87.3	25	M8	28	M16	3.2
ROTA NCE 315-106	249 - 320	397	SZA 31-13	0138187	21	50	58	111.1	25	M8	28	M16	4.7

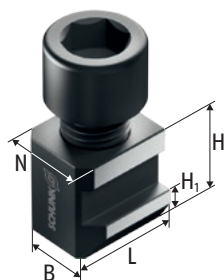
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T-nut

with fine serration 90°



NKA
T-nut



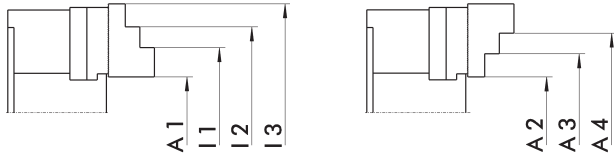
NKS
T-nut

Chuck type	Description	ID	N	B	H	H1	L	b	Cyl.-screw	Max. adm. tightening torque
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
ROTA NCE 165-53	NKA 1	0145103	14	17	18.5	6.5	36	20	M10 x 25	50
ROTA NCE 165-53	NKS 1	0143104	14	17	18.5	6.5	16		M10 x 25	50
ROTA NCE 210-66	NKA 2	0145104	17	19	20.5	7.5	42	22	M12 x 25	70
ROTA NCE 210-66	NKS 2	0143106	17	19	20.5	7.5	19		M12 x 25	70
ROTA NCE 260-81	NKA 3	0145105	21	25	26.5	10	54	28	M16 x 35	150
ROTA NCE 260-81	NKS 3	0143107	21	25	26.5	10	25		M16 x 35	150
ROTA NCE 315-106	NKA 3	0145105	21	25	26.5	10	54	28	M16 x 35	150
ROTA NCE 315-106	NKS 3	0143107	21	25	26.5	10	25		M16 x 35	150

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Hard stepped top jaws

with fine serration 90°



Jaw position I

Jaw position II

O.D. clamping

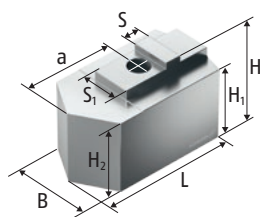
Chuck type	Description	ID	A1 [mm]	A2 [mm]	A3 [mm]	A4 [mm]
ROTA NCE 165-53	SHB 165	0121101	15 - 61	22 - 74	71 - 118	115 - 170
ROTA NCE 210-66	SHB 200	0121104	43 - 114	49 - 121	97 - 170	139 - 212
ROTA NCE 210-66	SHB 210	0121102	22 - 96	47 - 120	97 - 170	143 - 216
ROTA NCE 260-81	SHB 250	0121105	23 - 120	53 - 140	135 - 213	208 - 254
ROTA NCE 315-106	SHB 250	0121105	48 - 179	79 - 165	161 - 238	234 - 310

I.D. clamping

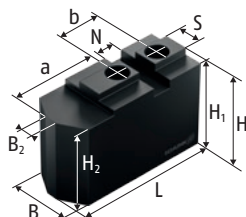
Chuck type	Description	ID	I1 [mm]	I2 [mm]	I3 [mm]
ROTA NCE 165-53	SHB 165	0121101	79 - 126	123 - 171	173 - 210
ROTA NCE 210-66	SHB 200	0121104	102 - 171	144 - 213	189 - 260
ROTA NCE 210-66	SHB 210	0121102	99 - 170	144 - 216	192 - 265
ROTA NCE 260-81	SHB 250	0121105	74 - 151	147 - 231	227 - 324
ROTA NCE 315-106	SHB 250	0121105	99 - 176	172 - 256	252 - 380

Soft top jaws

with tongue and groove



SRK-AL
Soft top jaws



SRK
Soft top jaws

Technical data

Chuck type	Description	ID	N [mm]	S [mm]	B [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA NCE 130-38	SRK 112	0136103	8	10	25	30	27.5	26	53	28	18	M8	0.7
ROTA NCE 130-38	SRKL 112	1496961	8	10	25	30	27.5	26	61.5	28	18	M8	0.8
ROTA NCE 130-38	SRKL-AL 112	1496963	8	10	25	30	27.5	26	61.5	28	18	M8	0.3

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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 NCE 130-38	IFT Set	1404235
ROTA NCE 165-53		
ROTA NCE 210-66		
ROTA NCE 260-81		
ROTA NCE 315-106		

Mounting wrench

For power lathe chucks with a turnable threaded ring in pipe design with two actuation tabs.



Suitable for	Description	ID
ROTA NCE 165-53	SSH-MR Ø53-122.5	1301751
ROTA NCE 210-66	SSH-MR Ø66-130	1301752
ROTA NCE 260-81	SSH-MR Ø81-165	1301753
ROTA NCE 315-106	SSH-MR Ø106-165	1301754

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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