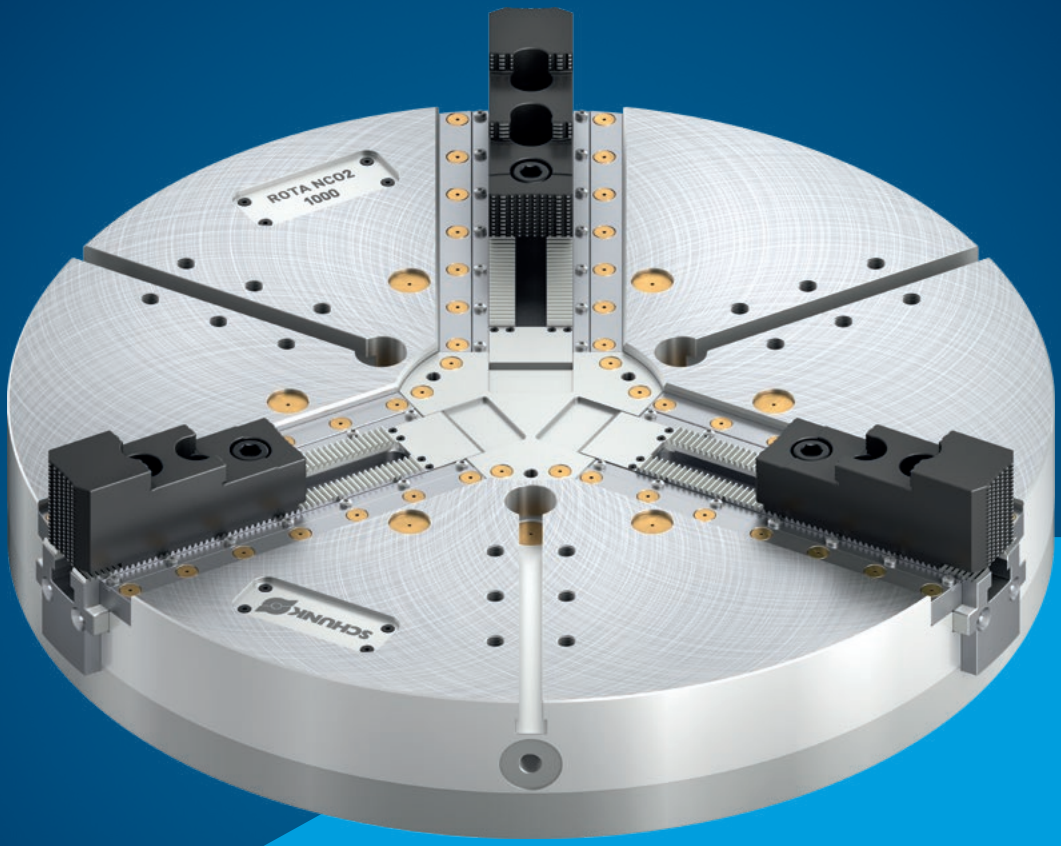
SCHUNK



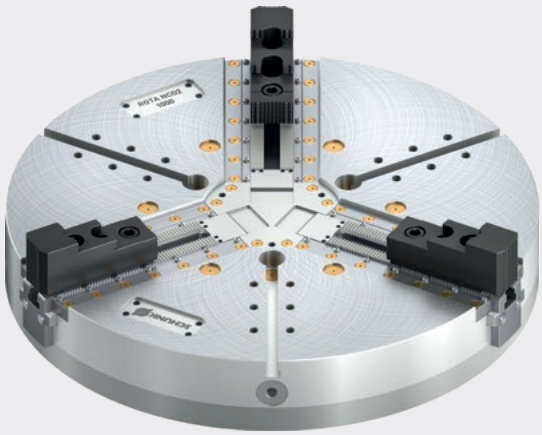
ROTA NC02

Large 3-jaw power lathe chucks for vertical lathes

Hand in hand for tomorrow

Weight-optimized large chucks with long jaw stroke. Optionally available with centrifugal force compensation or individual jaw adjustment

The ROTA NCO2 has been specially developed for vertical lathes. Higher workpiece weights can be clamped thanks to the weight-optimized chuck body. The long jaw strokes combined with high clamping forces enable workpieces with a large interfering contour to be clamped in a reliable process. As an option, the chucks can be equipped with centrifugal force compensation and individual jaw adjustment in order to run at higher speeds or to optimally align complicated workpieces to the clamping center.



Advantages – Your benefits

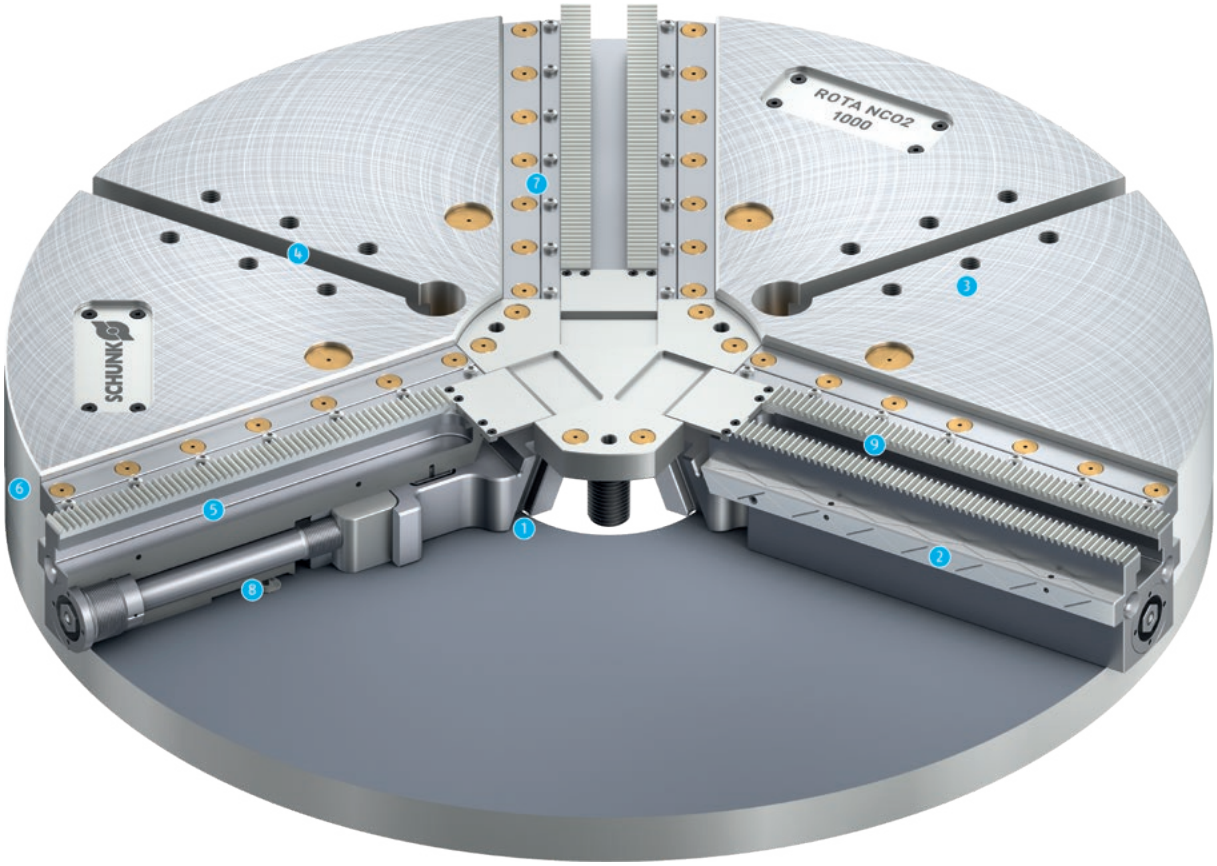
- **Precision wedge-hook power lathe chuck for highest quality requirements**
  Allows excellent machining results
- **High efficiency of the wedge hook system**
  Process-reliable clamping due to high clamping forces
- **Optimum jaw support for O.D. and I.D. clamping due to a very long base jaw guidance**
  Allows high clamping forces at a long service life
- **Optimized lubrication system**
  Consistently high clamping forces ensured
- **Longest jaw stroke at high jaw clamping force**
  Reliable and variable clamping of workpieces over interfering contours
- **Sealed against coolant and chips as standard via wiper strips, seals and sealed through-hole**
  Excellently suitable for the use on vertical lathes
- **Low height design**
  Maximum use of the machine room and maximum rigidity of the system
- **Weight-optimized cast body**
  Reduced energy consumption and higher workpiece weights possible
- **Module 2 serration**
  For easy setting up and cleaning
- **Optionally available with centrifugal force compensation**
  Less clamping force loss at high RPM
- **Optionally available with individual jaw adjustment**
  Workpieces can be optionally aligned to the rotation center

Technical data

Description	Max. rotational speed [min^{-1}]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke [mm]
ROTA NCO2 800	900	300	170	23	57
ROTA NCO2 1000	700	300	170	23	57
ROTA NCO2 1200	600	300	170	23	57
ROTA NCO2 1400	500	300	170	23	57

Function of ROTA NC02

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



1. **Wedge hook drive**
   Offers constantly high clamping forces in operation
2. **Optimized lubrication system**
   For consistently high clamping forces
3. **Mounting thread**
   For workpiece stops or cover plates
4. **Additional slot guidance on the chuck face**
   For workpiece stops or cover plates
5. **Long jaw guidance**
   Offers optimal support for O.D.- and I.D. clamping
6. **Low height design**
   Expands your machine's workspace
7. **Combined sealing strips**
   Seal the base jaw guidances and offer a good protection against coolant and chips
8. **Individual jaw adjustment as option**
   Workpieces can be optionally aligned to the rotation center
9. **Module 2 serration**
   For easy setting up and cleaning

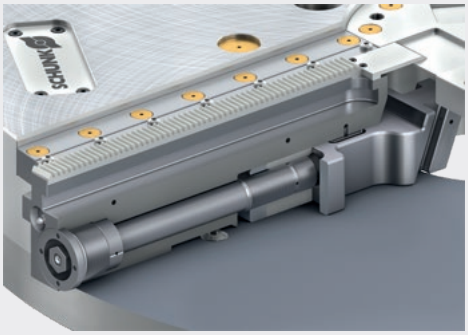
Combined sealing strips

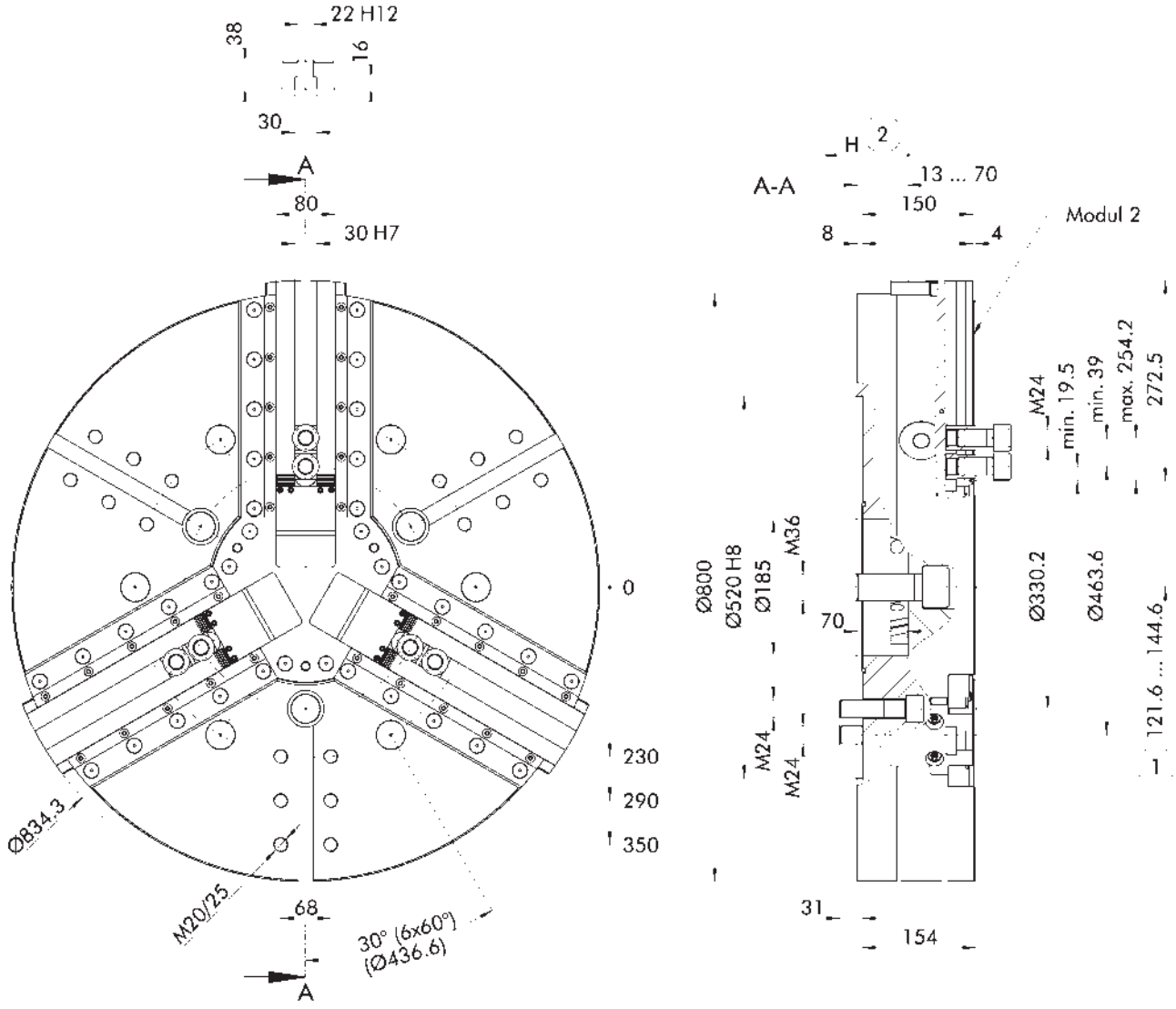
The combination of the scraper bar and the scraper plate resting against the base jaw provides excellent protection against penetration of chips and coolant.



Individual jaw adjustment (optional)

Due to individual jaw adjustment, the jaws can be adjusted individually and independently of each other. This ensures reliable clamping of both, angular and asymmetrical or rotationally symmetric workpieces.





Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

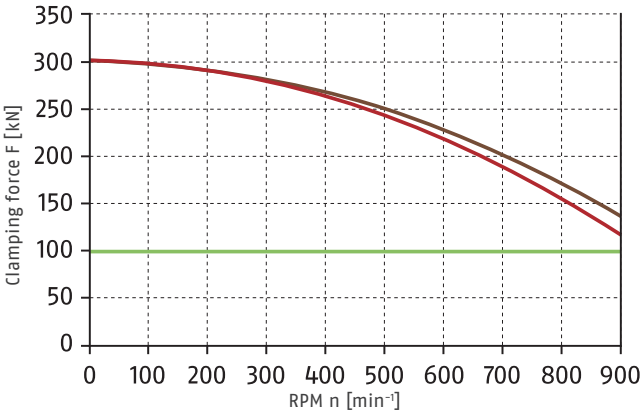
Spindle type	Spindle size	ID	Serration	Max. rotational speed [min⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Moment of inertia [kgm²]	Weight [kg]
-	Z520	1481247	Modul 2	900	300	170	23	57	32	391
-	Z520	1486021	Modul 2	900	300	170	23	57	32	391
-	Z520	1481248	Modul 2	900	300	170	23	57	32	399

ID 1486021 with centrifugal force compensation
ID 1481248 with individual jaw adjustment (30 mm per jaw)

Scope of delivery

Chuck, T-nuts or mounting screws for top jaws, chuck mounting screws, eye bolt, and operating manual

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

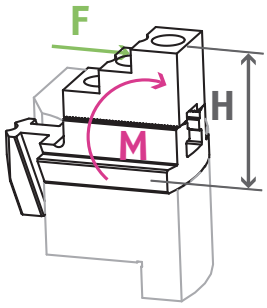
SP-HB-M 1000
30.45 kg



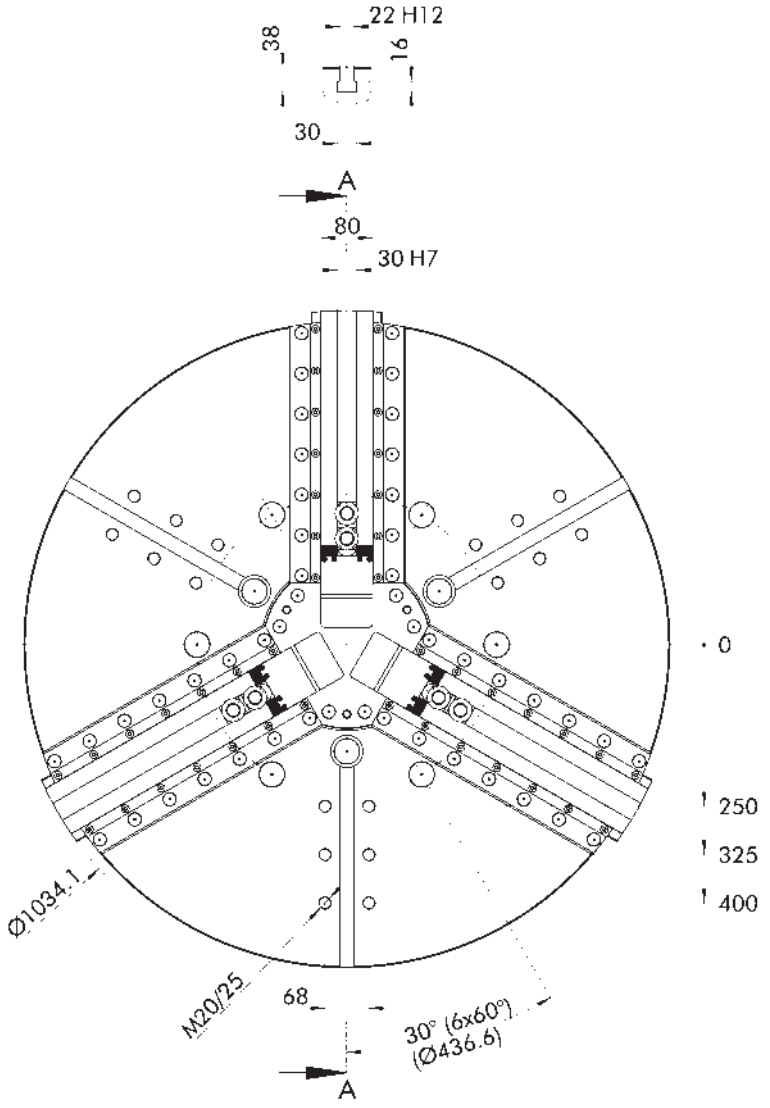
SWB-M 1000
31.8 kg

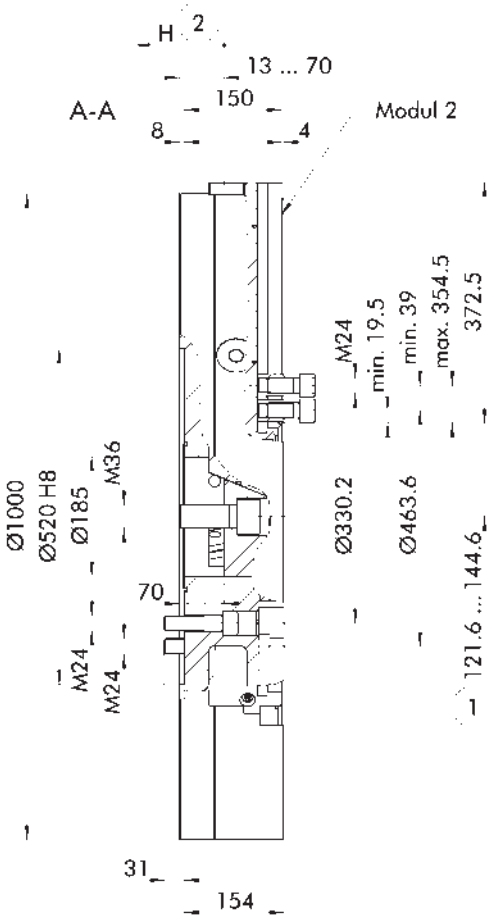


Load of base jaw guidance



M_{max} = 16800 Nm





Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

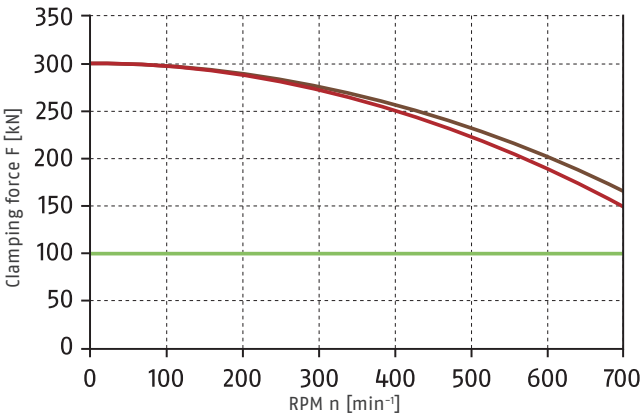
Spindle type	Spindle size	ID	Serration	Max. rotational speed [min⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Moment of inertia [kgm²]	Weight [kg]
-	Z520	1481305	Modul 2	700	300	170	23	57	65	519
-	Z520	1486022	Modul 2	700	300	170	23	57	65	519
-	Z520	1481306	Modul 2	700	300	170	23	57	66	531.5

ID 1486022 with centrifugal force compensation
ID 1481306 with individual jaw adjustment (30 mm per jaw)

Scope of delivery

Chuck, T-nuts or mounting screws for top jaws, chuck mounting screws, eye bolt, and operating manual

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

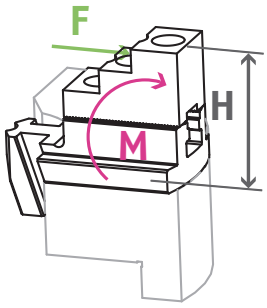
SP-HB-M 1000
30.45 kg



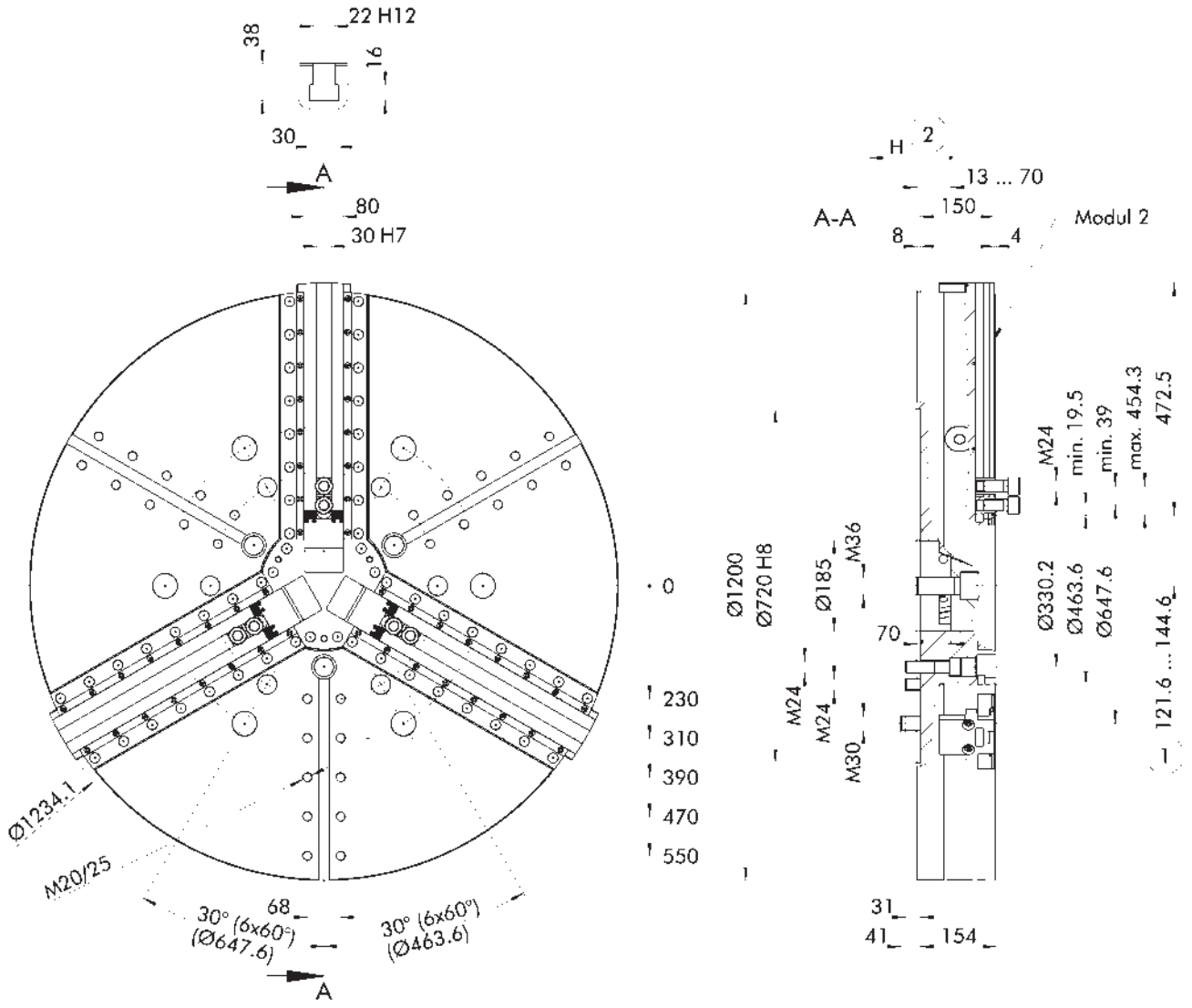
SWB-M 1000
31.8 kg



Load of base jaw guidance



M_{max} = 16800 Nm



Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

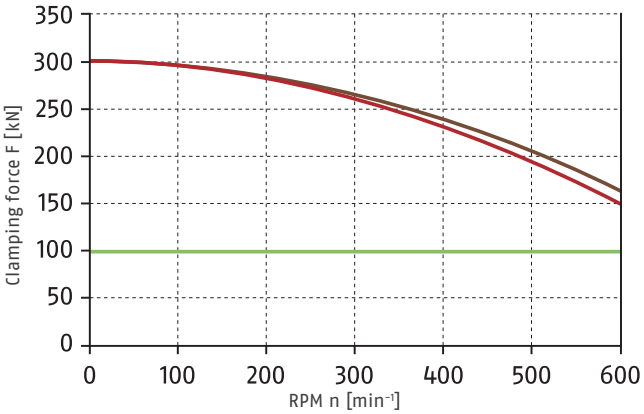
Spindle type	Spindle size	ID	Serration	Max. rotational speed [min^{-1}]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Moment of inertia [kgm²]	Weight [kg]
-	Nr. 28 (Z720)	1481309	Modul 2	600	300	170	23	57	122	671
-	Nr. 28 (Z720)	1486023	Modul 2	600	300	170	23	57	122	671
-	Nr. 28 (Z720)	1481310	Modul 2	600	300	170	23	57	124	690

ID 1486023 with centrifugal force compensation
ID 1481310 with individual jaw adjustment (30 mm per jaw)

Scope of delivery

Chuck, T-nuts or mounting screws for top jaws, chuck mounting screws, eye bolt, and operating manual

Clamping force-RPM-diagram

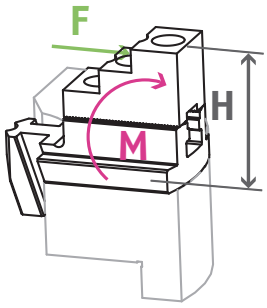


Required minimum clamping force F_{spmin} 33%

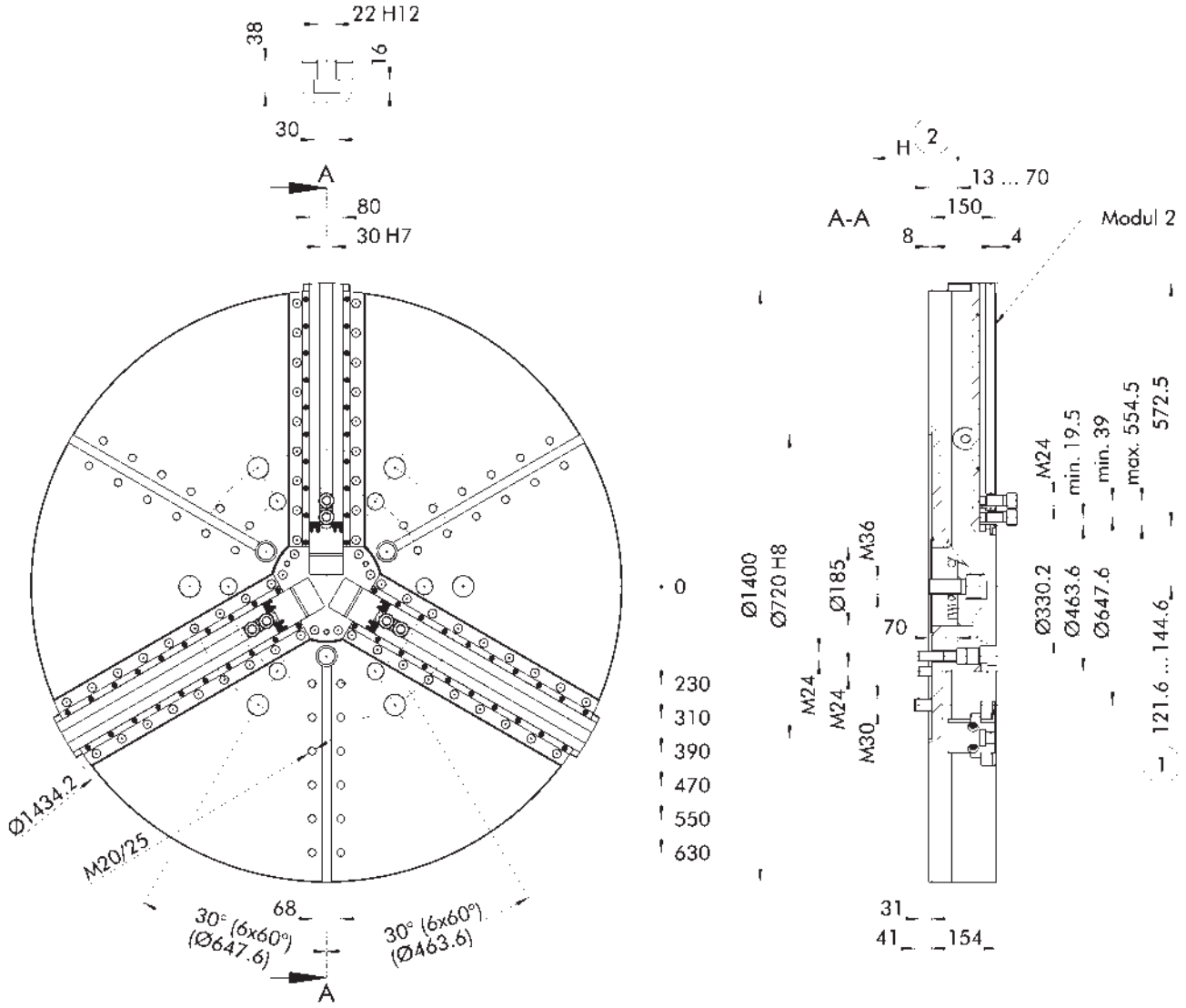
SP-HB-M 1000
30.45 kg

SWB-M 1000
31.8 kg

Load of base jaw guidance



M_{max} = 16800 Nm



Subject to technical changes.

① Distance to center of first tooth

② Piston stroke direction

Technical data

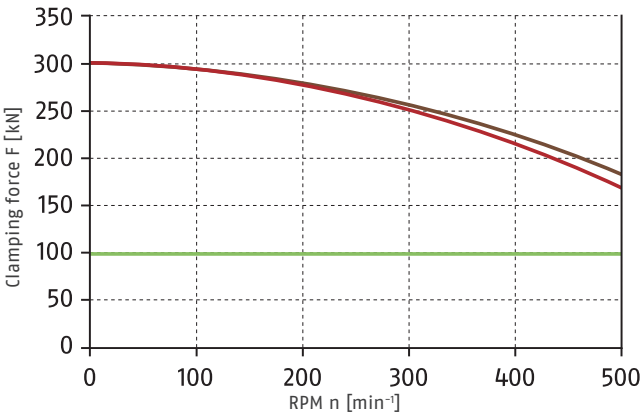
Spindle type	Spindle size	ID	Serration	Max. rotational speed [min^{-1}]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke (H) [mm]	Moment of inertia [kgm²]	Weight [kg]
-	Nr. 28 (Z720)	1481323	Modul 2	500	300	170	23	57	200	824
-	Nr. 28 (Z720)	1486024	Modul 2	500	300	170	23	57	200	824
-	Nr. 28 (Z720)	1481324	Modul 2	500	300	170	23	57	205	849

ID 1486024 with centrifugal force compensation
ID 1481324 with individual jaw adjustment (30 mm per jaw)

Scope of delivery

Chuck, T-nuts or mounting screws for top jaws, chuck mounting screws, eye bolt, and operating manual

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

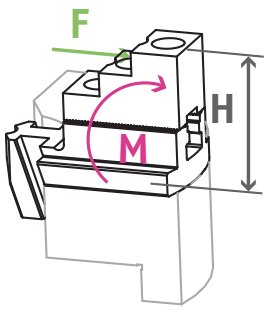
SP-HB-M 1000
30.45 kg



SWB-M 1000
31.8 kg



Load of base jaw guidance



M_{max} = 16800 Nm

T-nut



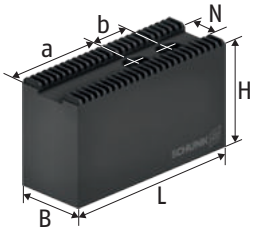
NS
T-nut

Chuck type	Description	ID	H [mm]	H1 [mm]	G	Cyl.-screw	Max. adm. tightening torque [Nm]
ROTA NCO2 800	NS 240-2	0140124	41	15	M24	M24 x 60	450
ROTA NCO2 1000	NS 240-2	0140124	41	15	M24	M24 x 60	450
ROTA NCO2 1200	NS 240-2	0140124	41	15	M24	M24 x 60	450
ROTA NCO2 1400	NS 240-2	0140124	41	15	M24	M24 x 60	450

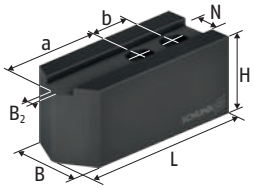
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

Soft top jaws

Modul 2



SWB-M
Soft top jaws



SWBL-M
Soft top jaws

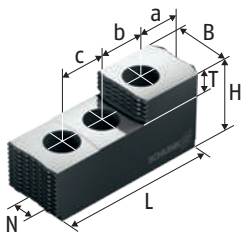
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	a [mm]	b [mm]	m/SET [kg]
ROTA NC02 800	SWB-M 1000	1506279	30	80	105	195	100	60	31.8
ROTA NC02 800	SWBL-M 1000	1506303	30	80	105	258	148	60	40.3
ROTA NC02 1000	SWB-M 1000	1506279	30	80	105	195	100	60	31.8
ROTA NC02 1000	SWBL-M 1000	1506303	30	80	105	258	148	60	40.3
ROTA NC02 1200	SWB-M 1000	1506279	30	80	105	195	100	60	31.8
ROTA NC02 1200	SWBL-M 1000	1506303	30	80	105	258	148	60	40.3
ROTA NC02 1400	SWB-M 1000	1506279	30	80	105	195	100	60	31.8
ROTA NC02 1400	SWBL-M 1000	1506303	30	80	105	258	148	60	40.3

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

Hard stepped top jaws

Modul 2



SP-HB-M
Hard stepped top jaws

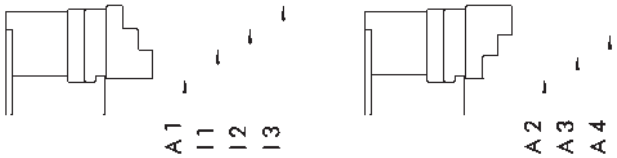
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	T [mm]	a [mm]	b [mm]	c [mm]	m/SET [kg]
ROTA NC02 800	SP-HB-M 1000	1506315	30	80	105	250	22	89.2	60	60	30.4
ROTA NC02 1000	SP-HB-M 1000	1506315	30	80	105	250	22	89.2	60	60	30.4
ROTA NC02 1200	SP-HB-M 1000	1506315	30	80	105	250	22	89.2	60	60	30.4
ROTA NC02 1400	SP-HB-M 1000	1506315	30	80	105	250	22	89.2	60	60	30.4

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

Hard stepped top jaws

Modul 2



Jaw position I

Jaw position II

O.D. clamping

Chuck type	Description	ID	A1 [mm]	A2 [mm]	A3 [mm]	A4 [mm]
ROTA NC02 800	SP-HB-M 1000	1506315	45 - 267	100 - 422	276 - 596	440 - 762
ROTA NC02 1000	SP-HB-M 1000	1506315	45 - 455	100 - 610	276 - 785	440 - 950
ROTA NC02 1200	SP-HB-M 1000	1506315	45 - 643	100 - 797	276 - 973	440 - 1137
ROTA NC02 1400	SP-HB-M 1000	1506315	45 - 831	100 - 986	276 - 1161	440 - 1326

I.D. clamping

Chuck type	Description	ID	I1 [mm]	I2 [mm]	I3 [mm]
ROTA NC02 800	SP-HB-M 1000	1506315	212 - 427	372 - 591	545 - 766
ROTA NC02 1000	SP-HB-M 1000	1506315	212 - 614	372 - 779	545 - 954
ROTA NC02 1200	SP-HB-M 1000	1506315	212 - 801	372 - 967	545 - 1142
ROTA NC02 1400	SP-HB-M 1000	1506315	212 - 989	372 - 1155	545 - 1330

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 NCO2 800 ROTA NCO2 1000 ROTA NCO2 1200 ROTA NCO2 1400	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 NCO2 800 ROTA NCO2 1000 ROTA NCO2 1200 ROTA NCO2 1400	IFT adapter set	1498512

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

H.-D. SCHUNK GmbH & Co.
Spanntechnik KG

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