

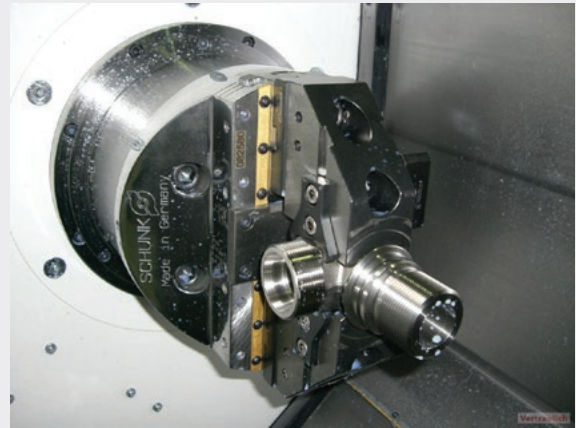


ROTA 2B

**2-jaw power lathe chuck
with long jaw stroke for
clamping fitting parts**

Robust 2-jaw power lathe chuck with long stroke and simultaneous maximum clamping force

The SCHUNK 2-jaw chuck ROTA 2B is particularly suitable for clamping workpieces for which a large interfering contour must be clamped (e.g. for fitting parts). For this purpose, the lathe chuck combines a long jaw stroke with maximum clamping forces. Standard mounting threads allow many ways of mounting workpiece stops or consoles.



Advantages – Your benefits

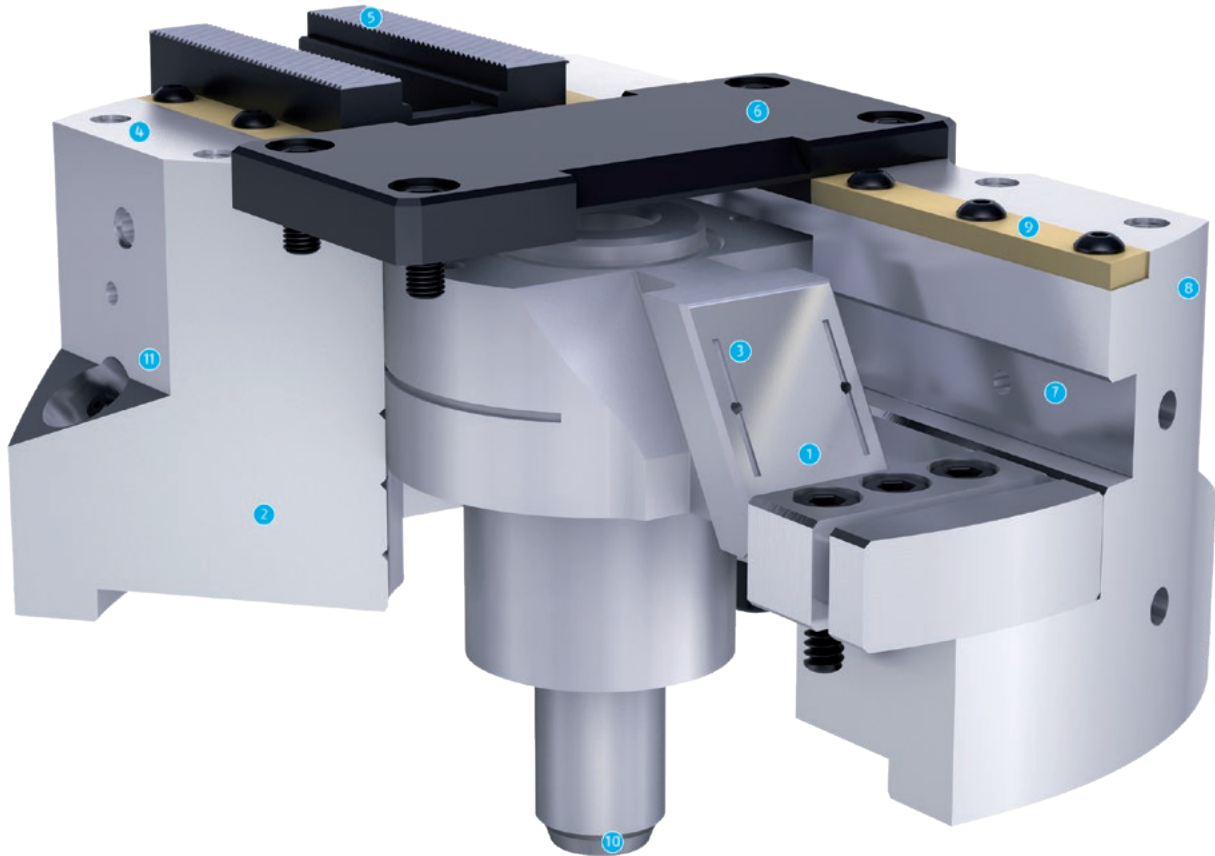
- + Precision wedge-hook power lathe chuck for highest quality requirements**
Allows excellent machining results
- + High efficiency of the wedge hook system**
Process-reliable clamping due to high clamping forces
- + Optimum jaw support for O.D. and I.D. clamping due to a very long base jaw guidance**
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
- + Media feed-through (coolant or air) as option integrated in the chuck body**
Flexibility depending on the application
- + Low height design**
Maximum use of the machine room and maximum rigidity of the system
- + Base jaws with fine serration or tongue and groove as standard**
High flexibility in the range of top jaws
- + Low chuck weight**
Fast acceleration and deceleration operations shorten the cycle times
- + 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]	Piston stroke [mm]
ROTA 2B 125	5300	26	23	10	17.5
ROTA 2B 160	4000	40	32	12.5	22
ROTA 2B 200	3200	54	45	15	26
ROTA 2B 250	2700	75	61	16	28
ROTA 2B 315	2200	85	68	18	32
ROTA 2B 400	2000	85	68	18	32

Function of ROTA 2B

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

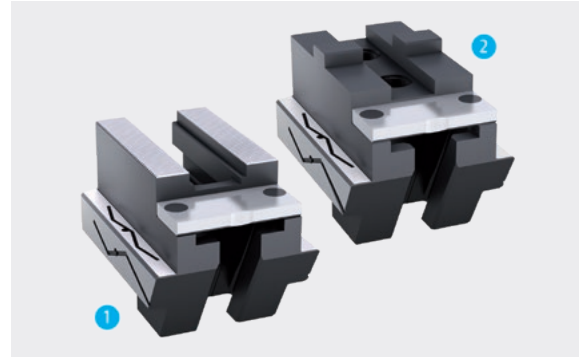


- | | |
|--|---|
| <p>1 Wedge hook drive
Offers constantly high clamping forces in operation</p> <p>2 Hardened and extremely rigid base body
Therefore a longer service life at highest precision. Even with maximum clamping force</p> <p>3 Optimized lubrication system
Consistently high clamping forces ensured</p> <p>4 Mounting thread
For workpiece stops or consoles</p> <p>5 Base jaws with fine serration or tongue and groove as standard
High flexibility in the range of top jaws</p> | <p>6 Cover plate
Is centered via a fitting bore, which can also be used to position various workpiece stops</p> <p>7 Long jaw guidance
Offers optimal support for O.D.- and I.D. clamping</p> <p>8 Low height design
Expands your machine's workspace</p> <p>9 Wiper strips
Seal the base jaw guidances and offer a good protection against coolant and chips</p> <p>10 Central media supply
Available on request for air control or coolant</p> <p>11 Weight-optimized design
For great economy in daily use</p> |
|--|---|

Three standardized jaw interfaces available

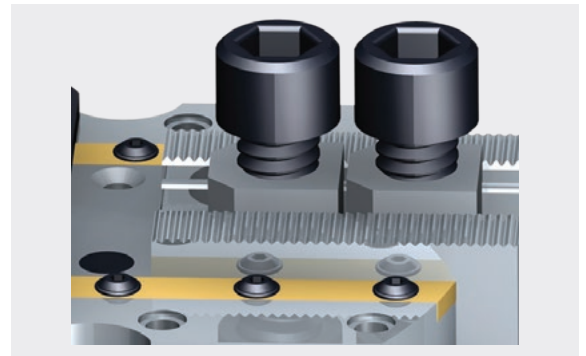
Select one standardized jaw interface from the 3 standardized versions and benefit from the fact that existing top jaws can also be used on the new SCHUNK lathe chuck.

- ① **Fine serration**
 - 1/16" x 90°
 - 3/32" x 90°
- ② **Metric tongue and groove**



Adjustable brass wiper bars

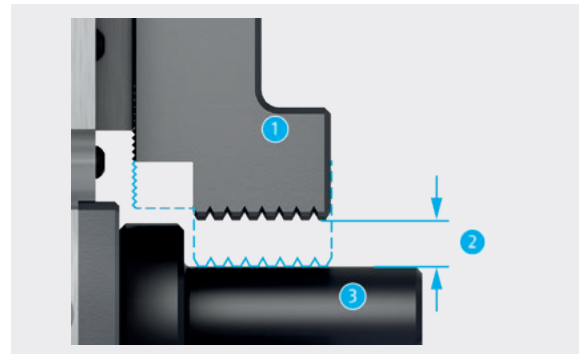
Adjustable brass wiper bars seal the base jaws to give protection against coolant and chips.

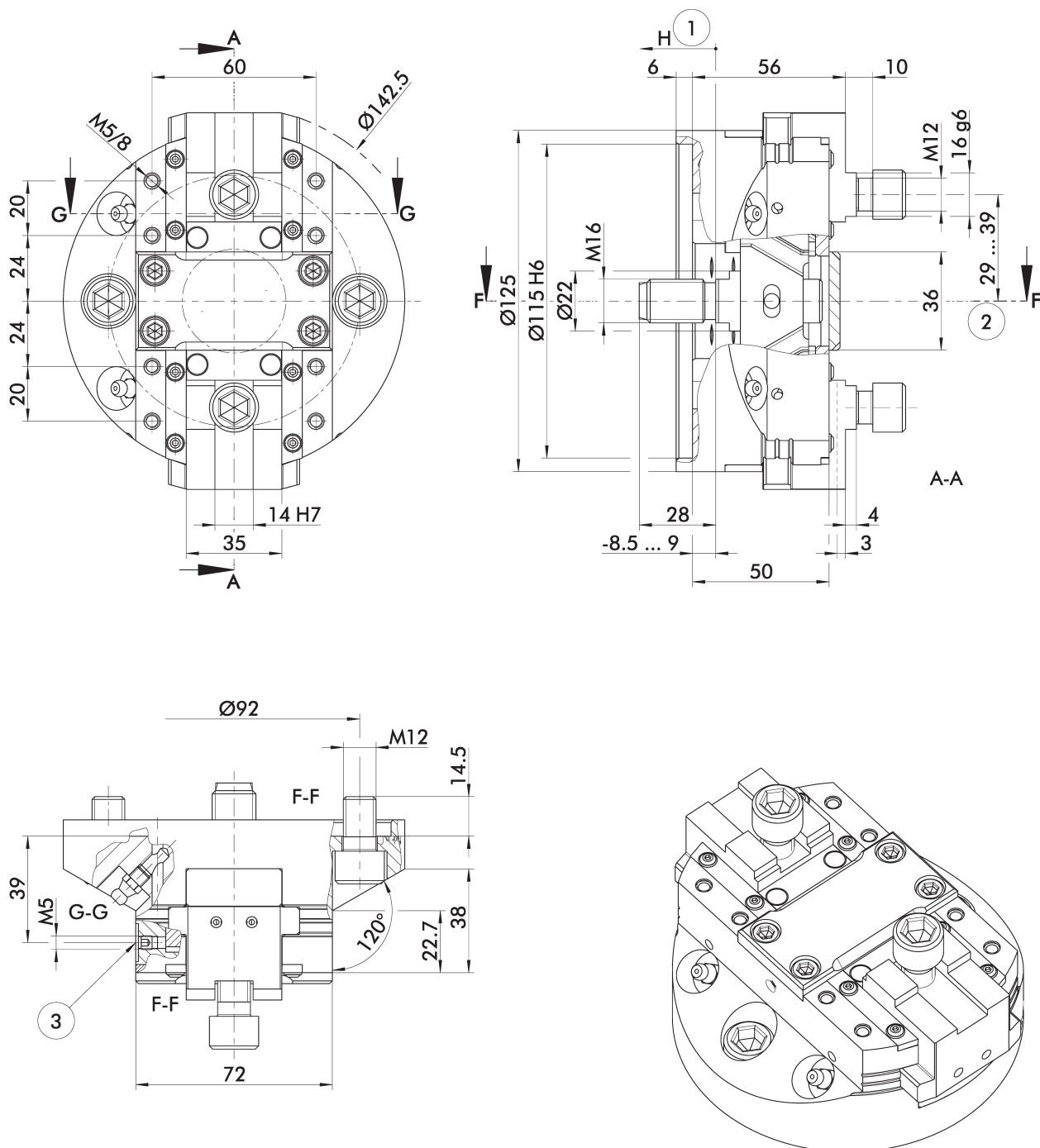


Largest jaw stroke

The extremely large jaw stroke and high clamping force allow clamping over interfering contours. This is particularly useful when clamping fittings.

- ① **Chuck jaw**
- ② **Jaw stroke**
- ③ **Workpiece**





Backstop cylinder side onwards, backwards in the adapter plate.
Subject to technical changes.

① Piston stroke direction

② Distance to center of tongue and groove

③ Air purge connection

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]
-	Z115	0813031	Tongue and groove	5300	26	23	0.007	3.7

Scope of delivery

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

Note

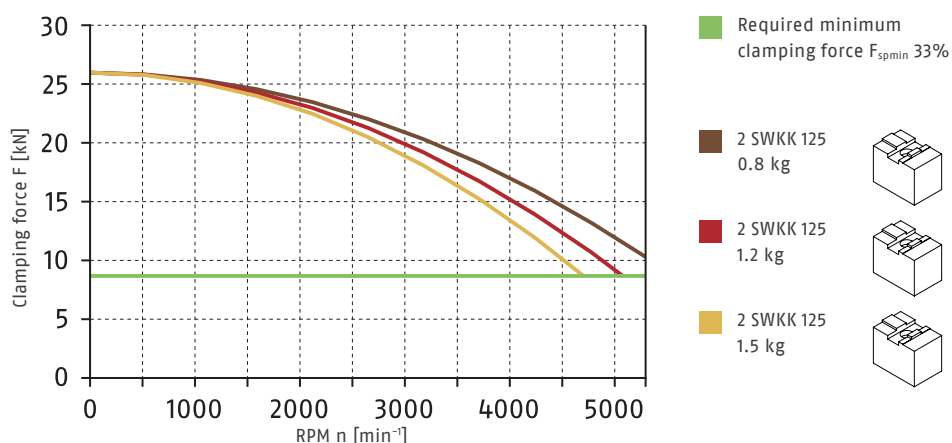
Caution!

Due to the geometry of the base jaws, the ROTA 2B 125 chuck should be used for O.D. clamping only!

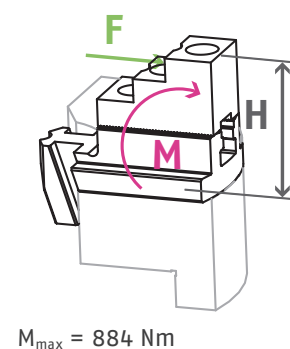
Further technical data

Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 125	10	17.5	68

Clamping force-RPM-diagram



Load of base jaw guidance



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)	0813040	1/16" x 90°	4000	40	32	0.02	6.7
ISO 702-4	Nr. 5 (Z140)	0813041	Tongue and groove	4000	40	32	0.02	6.7

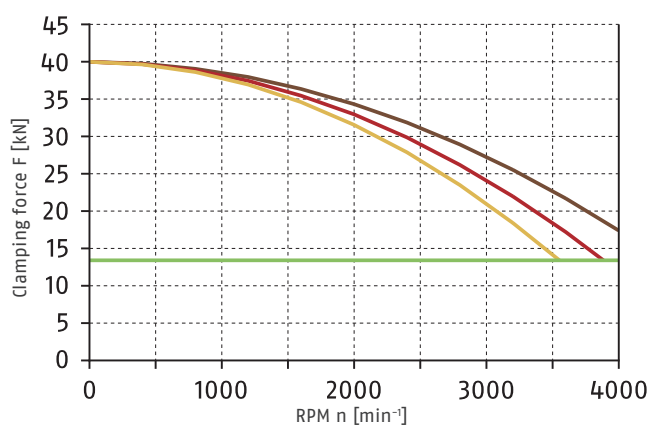
Scope of delivery

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

Further technical data

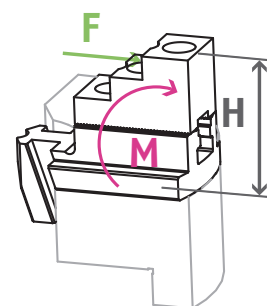
Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 160	12.5	22	82

Clamping force-RPM-diagram

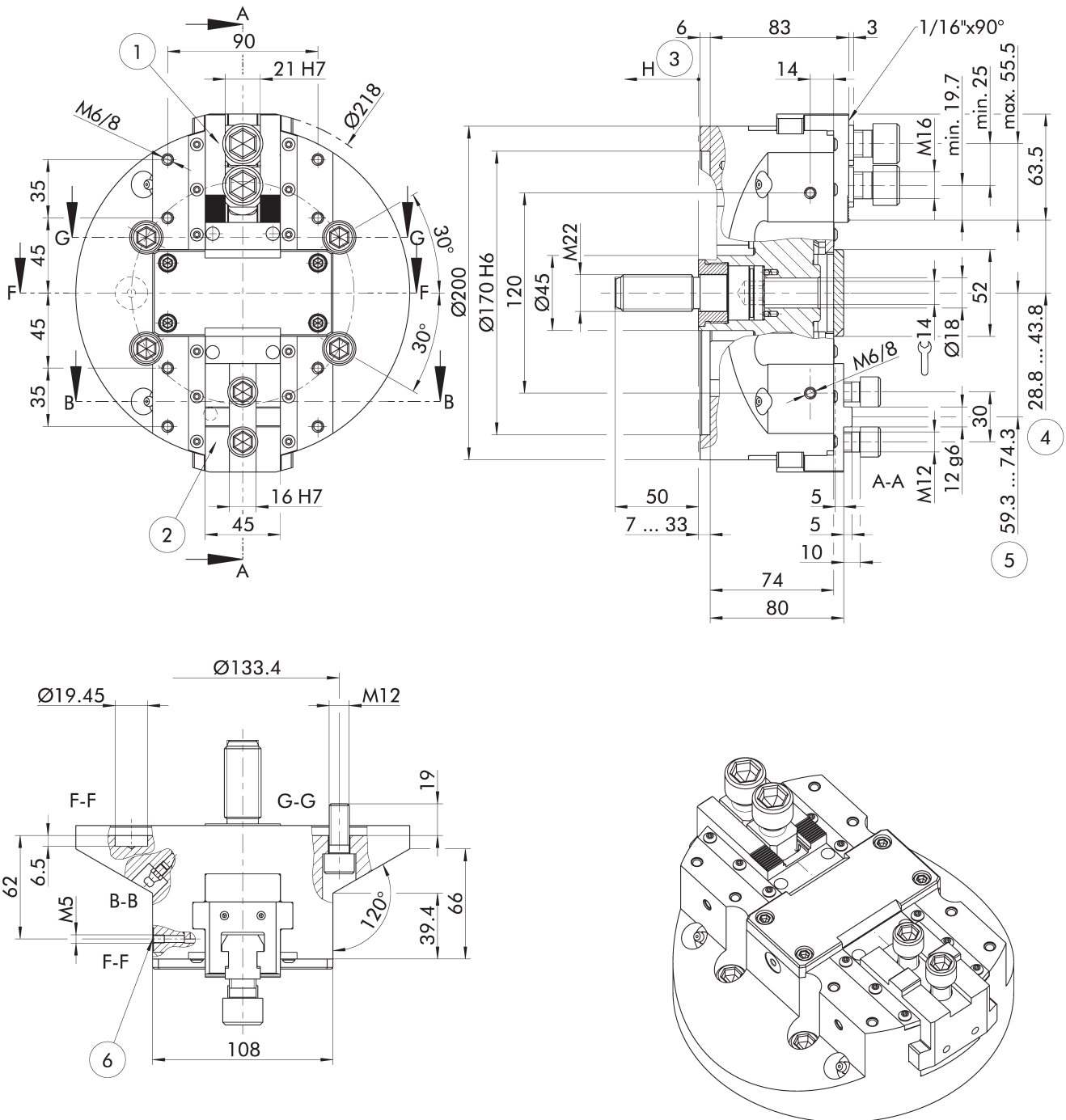


- Required minimum clamping force F_{spmin} 33%
- 2 SWKK 160
1.1 kg
- 2 SWKK 160
1.4 kg
- 2 SWKK 160
3.1 kg

Load of base jaw guidance



$$M_{max} = 1640 \text{ Nm}$$



Backstop cylinder side onwards, backwards in the adapter plate.
The drawing shows two jaw interfaces.
Subject to technical changes.

- ① Base jaws with fine serration
- ② Base jaws with tongue and groove
- ③ Piston stroke direction
- ④ Distance to center of first tooth
- ⑤ Distance to center of tongue and groove
- ⑥ Air purge connection

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)	0813050	1/16" x 90°	3200	54	45	0.06	13
ISO 702-4	Nr. 6 (Z170)	0813051	Tongue and groove	3200	54	45	0.06	13

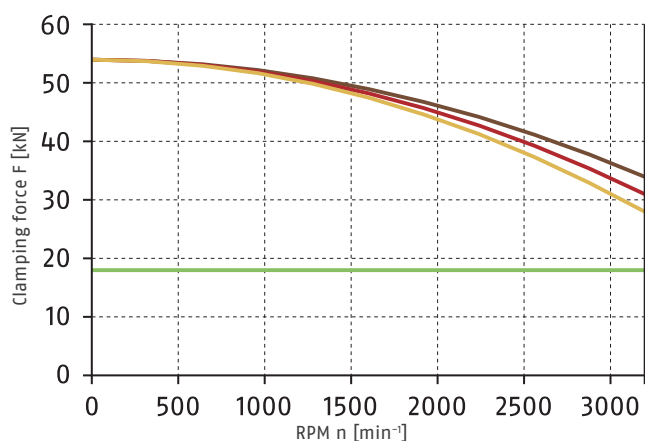
Scope of delivery

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

Further technical data

Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 200	15	26	107

Clamping force-RPM-diagram



Required minimum clamping force F_{spmin} 33%

2 SWK 200
2.1 kg



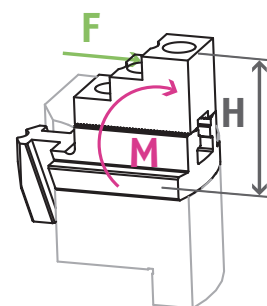
2 SWK 200
2.6 kg



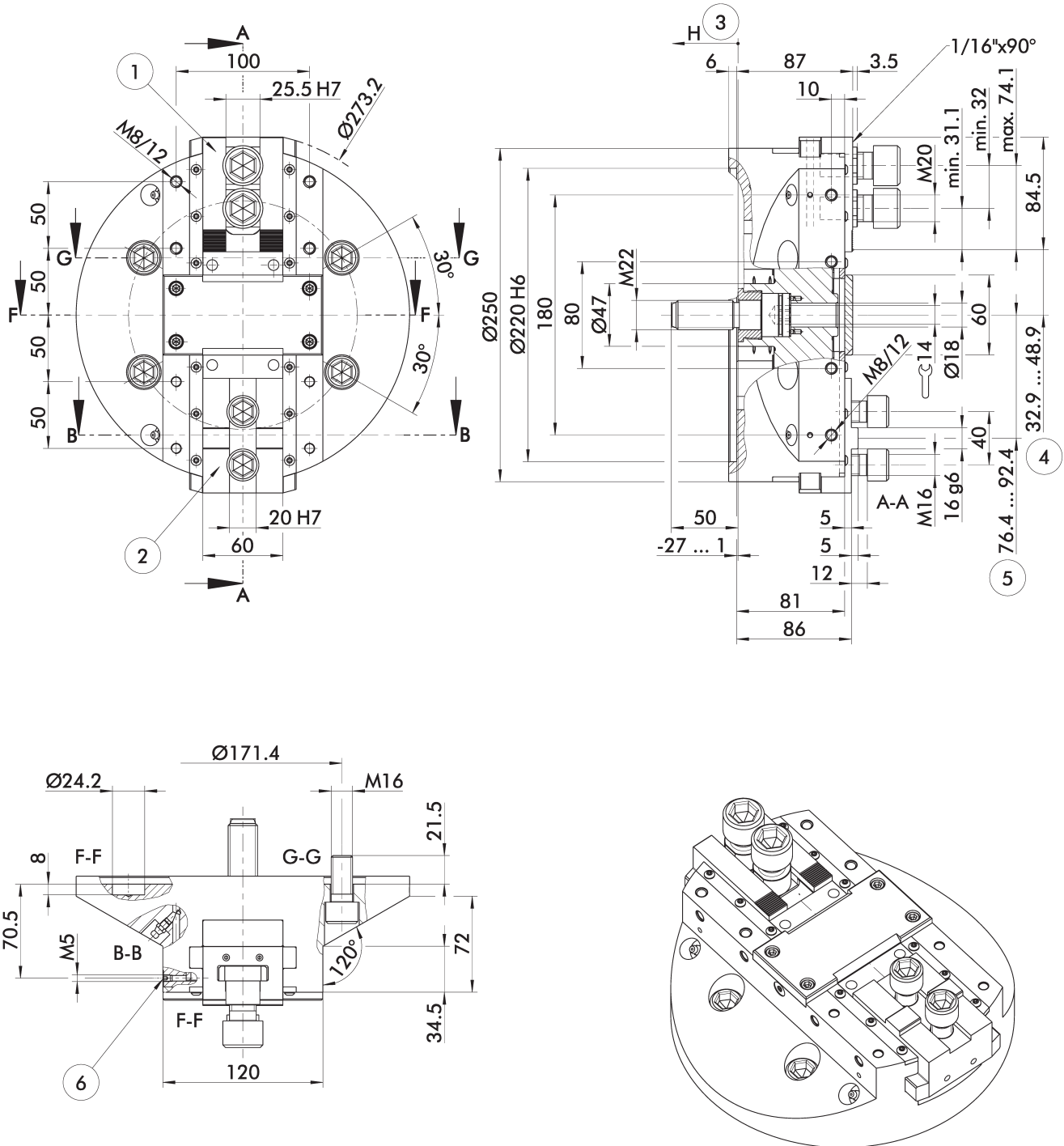
2 SWK 200
4.1 kg



Load of base jaw guidance



$$M_{max} = 2889 \text{ Nm}$$



Backstop cylinder side onwards, backwards in the adapter plate.
The drawing shows two jaw interfaces.
Subject to technical changes.

- ① Base jaws with fine serration
- ② Base jaws with tongue and groove
- ③ Piston stroke direction
- ④ Distance to center of first tooth
- ⑤ Distance to center of tongue and groove
- ⑥ Air purge connection

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)	0813060	1/16" x 90°	2700	75	61	0.16	22
ISO 702-4	Nr. 8 (Z220)	0813061	Tongue and groove	2700	75	61	0.16	22

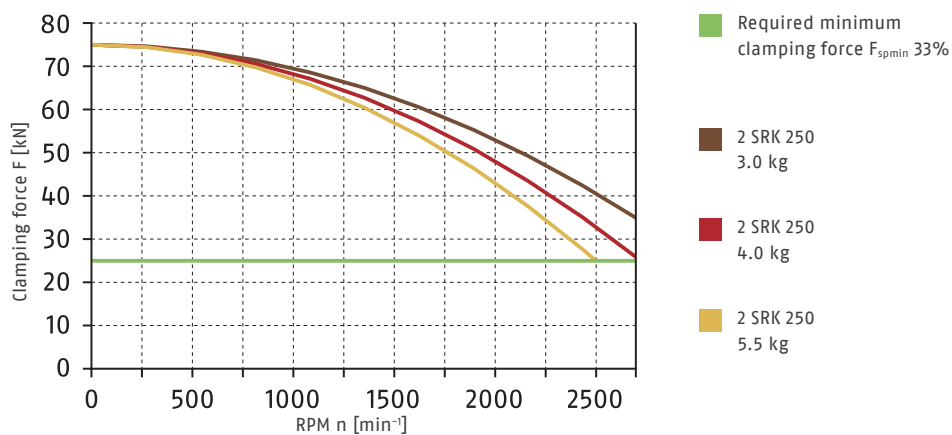
Scope of delivery

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

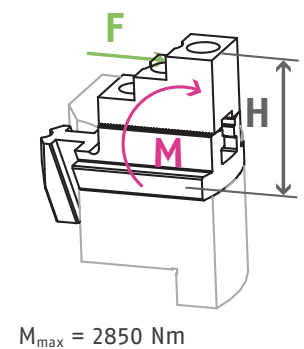
Further technical data

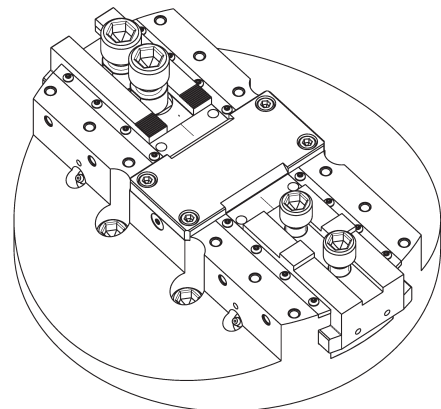
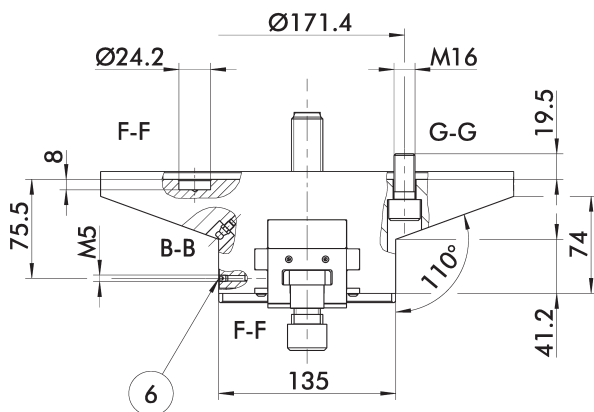
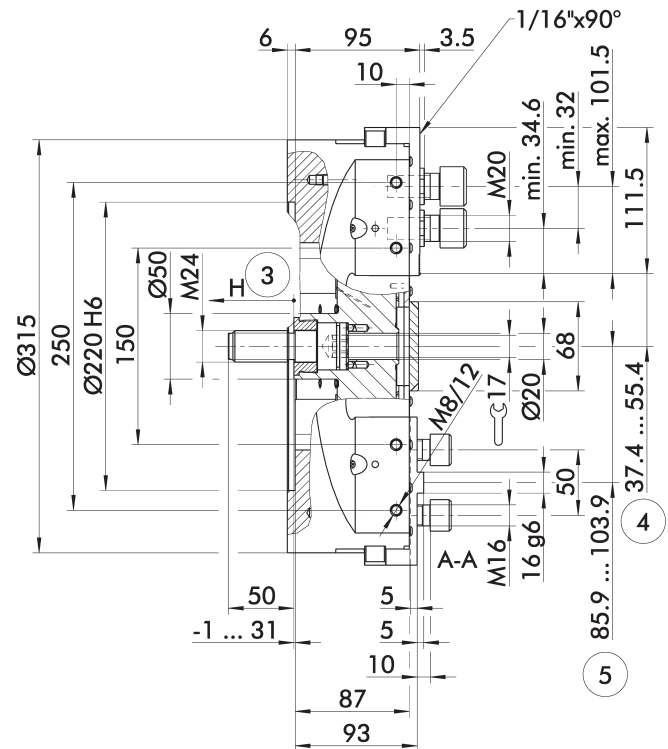
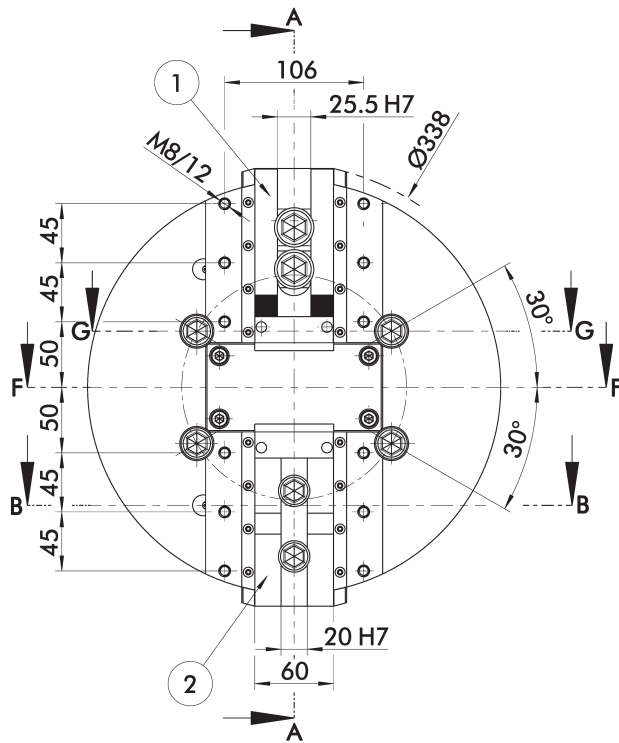
Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 250	16	28	107

Clamping force-RPM-diagram



Load of base jaw guidance





Backstop cylinder side onwards, backwards in the adapter plate.
The drawing shows two jaw interfaces.
Subject to technical changes.

- ① Base jaws with fine serration
- ② Base jaws with tongue and groove
- ③ Piston stroke direction
- ④ Distance to center of first tooth
- ⑤ Distance to center of tongue and groove
- ⑥ Air purge connection

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)	0813070	1/16" x 90°	2200	85	68	0.38	36
ISO 702-4	Nr. 8 (Z220)	0813071	Tongue and groove	2200	85	68	0.38	36

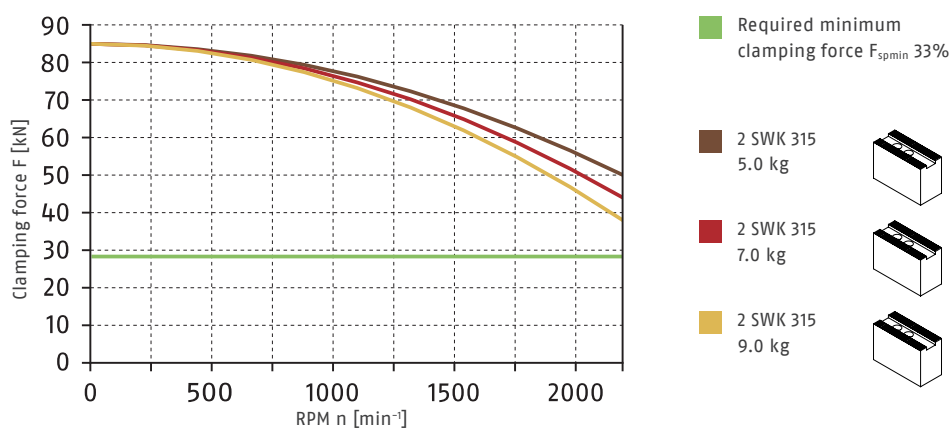
Scope of delivery

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

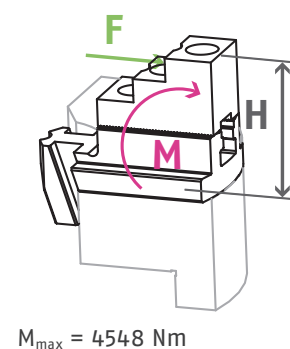
Further technical data

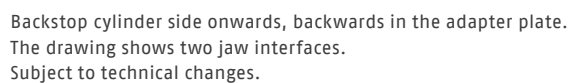
Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 315	18	32	107

Clamping force-RPM-diagram



Load of base jaw guidance





- 16

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. 11 (Z300)	0813080	1/16" x 90°	2000	85	68	0.38	53
ISO 702-4	Nr. 11 (Z300)	0813081	Tongue and groove	2000	85	68	0.38	53

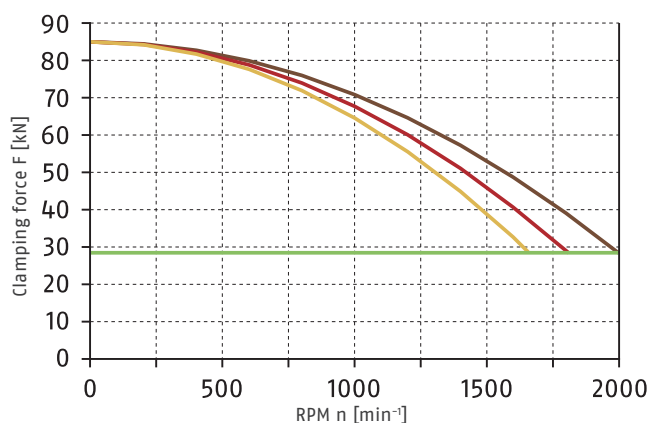
Scope of delivery

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

Further technical data

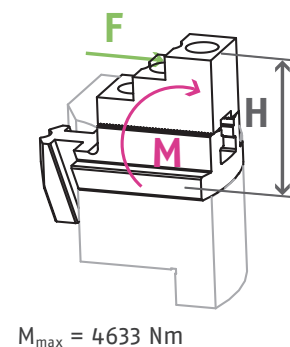
Chuck type	Stroke/jaw [mm]	Piston stroke (H) [mm]	Center jaw height [mm]
ROTA 2B 400	18	32	109

Clamping force-RPM-diagram



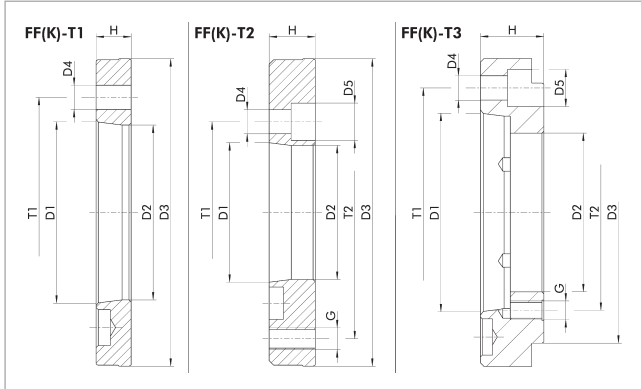
- Required minimum clamping force F_{spmin} 33%
- 2 SWK 400 5.0 kg
- 2 SWK 400 7.0 kg
- 2 SWK 400 9.0 kg

Load of base jaw guidance



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-T2 Z115-A3	FF-T2	0806005	ROTA 2B 125	Nr. 3	30	Z115	11 (6x60°)	17	M12 (2 x 180°)	18	70.6	92
FF-T2 Z115-A4	FF-T2	0806006	ROTA 2B 125	Nr. 4	30	Z115	11 (6x60°)	17	M12 (2 x 180°)	18	82.6	92
FF-T3 Z115-A5	FF-T3	0806007	ROTA 2B 125	Nr. 5	72	Z115	11 (6x60°)	18	M12 (2 x 180°)	32	104.8	92
FF-T2 Z140-A4	FF-T2	0805000	ROTA 2B 160	Nr. 4	61	Z140	11 (6x60°)	17	M10 (6x60°)	21	82.6	104.8
FF-T1 Z140-A5	FF-T1	0803000	ROTA 2B 160	Nr. 5	79.6	Z140	11 (6x60°)			16	104.8	
FF-T3 Z140-A6	FF-T3	0801000	ROTA 2B 160	Nr. 6	85	Z140	13 (6 x 60°)	20	M10 (6x60°)	34	133.4	104.8
FF-T2 Z170-A5	FF-T2	0805001	ROTA 2B 200	Nr. 5	79.6	Z170	11 (6x60°)	18	M12 (12 x 30°)	25	104.8	133.4
FF-T1 Z170-A6	FF-T1	0803001	ROTA 2B 200	Nr. 6	103.2	Z170	13 (6 x 60°)			17	133.4	
FF-T3 Z170-A8	FF-T3	0801001	ROTA 2B 200	Nr. 8	113	Z170	17 (6x60°)	26	M12 (6x60°) M12 (2x180°)	40	171.4	133.4
FF-T2 Z220-A5	FF-T2	0805002	ROTA 2B 250	Nr. 5	79.6	Z220	11 (6x60°)	17	M16 (6x60°)	28	104.8	171.4
FF-T2 Z220-A6	FF-T2	0805003	ROTA 2B 315	Nr. 6	103.2	Z220	13 (6 x 60°)	20	M16 (2x180°)	28	133.4	171.4
FF-T1 Z220-A8	FF-T1	0803002	ROTA 2B 250	Nr. 8	136.2	Z220	17 (6x60°) 17 (2x180°)			19	171.4	
FF-T3 Z220-A11	FF-T3	0803003	ROTA 2B 315	Nr. 11	130	Z220	21 (6x60°)	32	M16 (12 x 30°)	50	235	171.4
FF-T3 Z220-A15-1	FF-T3	0803020	ROTA 2B 250	Nr. 15	145	Z220	26 (6x60°)	38	M16 (6x60°)	55	330.2	171.4
FF-T3 Z220-A15-2	FF-T3	0803021	ROTA 2B 315	Nr. 15	145	Z220	23 (6x60°)	35	M16 (6x60°)	55	330.2	171.4
FF-T2 Z300-A6	FF-T2	0805004	ROTA 2B 400	Nr. 6	103.2	Z300	14 (6x60°)	20	M20 (6x60°) M20 (3x120°)	30	133.4	235
FF-T2 Z300-A8	FF-T2	0805005	ROTA 2B 400	Nr. 8	136.2	Z300	17 (6x60°) 22 (6x60°) 22 (3x120°)	26	M20 (6x60°) M20 (3x120°)	30	171.4	235
FF-T1 Z300-A11	FF-T1	0803004	ROTA 2B 400	Nr. 11	192.9	Z300				21	235	
FF-T3 Z300-A15-1	FF-T3	0803005	ROTA 2B 400	Nr. 15	190	Z300	26 (6x60°)	38	M20 (6 x 60°)	55	330.2	235
FF-T3 Z300-A15-2	FF-T3	0803022	ROTA 2B 400	Nr. 15	190	Z300	23 (6x60°)	35	M20 (6 x 60°)	55	330.2	235

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

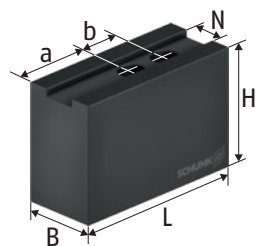
Reduction adapter plates are used if the mounting bolt circle of the spindle is smaller than the one of the lathe chuck mounting bolt circle. The adapter plate is first mounted on the spindle and then the lathe chuck is mounted on the adapter plate.

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 90°



2 SWK
Soft top jaws

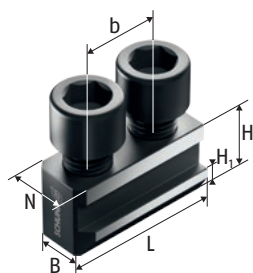
Technical data

Chuck type	Description	ID	N [mm]	B [mm]	H [mm]	L [mm]	a [mm]	b [mm]	Screws	m/SET [kg]
ROTA 2B 160	2 SWK 160	0126106	17	60	60	70	36	22	M12	3.4
ROTA 2B 200	2 SWK 200	0126102	21	80	80	95	45	28	M16	8.2
ROTA 2B 250	2 SWK 250	0126103	25.5	80	80	110	55	35	M20	9.0
ROTA 2B 315	2 SWK 315	0126104	25.5	80	80	125	62	35	M20	10.3
ROTA 2B 400	2 SWK 400	0126105	25.5	80	80	150	87	35	M20	12.7

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

T-nut

with fine serration 90°



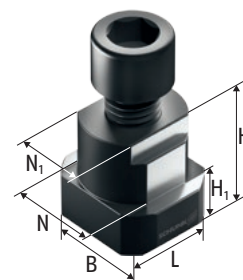
NKA
T-nut



NS
T-nut



NKS
T-nut



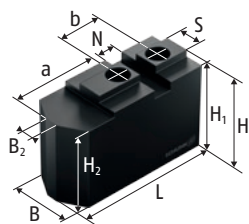
NS
T-nut

Chuck type	Description	ID	N	B	H	H1	L	b	Cyl.-screw	Max. adm. tightening torque
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
ROTA 2B 160	NKS 2	0143106	17	19	20.5	7.5	19		M12 x 25	70
ROTA 2B 200	NKA 3	0145105	21	25	26.5	10	54	28	M16 x 35	150
ROTA 2B 200	NKS 3	0143107	21	25	26.5	10	25		M16 x 35	150
ROTA 2B 250	NS 200	0140103	25.5	35.8	29	11	27.8		M20 x 40	220
ROTA 2B 250	NS 25.5-21	0140109	25.5	36	29	11	28		M16 x 35	150
ROTA 2B 315	NS 200	0140103	25.5	35.8	29	11	27.8		M20 x 40	220
ROTA 2B 315	NS 25.5-21	0140109	25.5	36	29	11	28		M16 x 35	150
ROTA 2B 400	NS 200	0140103	25.5	35.8	29	11	27.8		M20 x 40	220
ROTA 2B 400	NS 25.5-21	0140109	25.5	36	29	11	28		M16 x 35	150

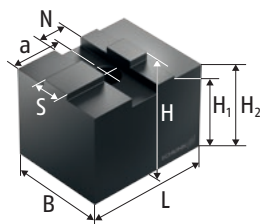
Our complete range of chuck jaws can be found online in our Chuck Jaw Quickfinder and on schunk.com

Soft top jaws

with tongue and groove



2 SRK
Soft top jaws



2 SWKK
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 2B 125	2 SWKK 125	0126100	16	14	40	48	45.5	45	60	31		M12	1.5
ROTA 2B 160	2 SWKK 160	0126101	18	18	60	60	56	54	76	41		M16	3.5
ROTA 2B 200	2 SRK 200	0136118	12	16	40	60			94	49	30	M12	2.6
ROTA 2B 250	2 SRK 250	0136120	16	20	50	80			117	60	40	M16	5.5
ROTA 2B 315	2 SRK 315	0136121	16	20	50	80			149	67	50	M16	7.4
ROTA 2B 400	2 SRK 400	0136122	18	22	60	100			180	86	60	M16	14.3

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

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 2B 125	IFT Set	1404235
ROTA 2B 160		
ROTA 2B 200		
ROTA 2B 250		
ROTA 2B 315		
ROTA 2B 400		

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 2B 400	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



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