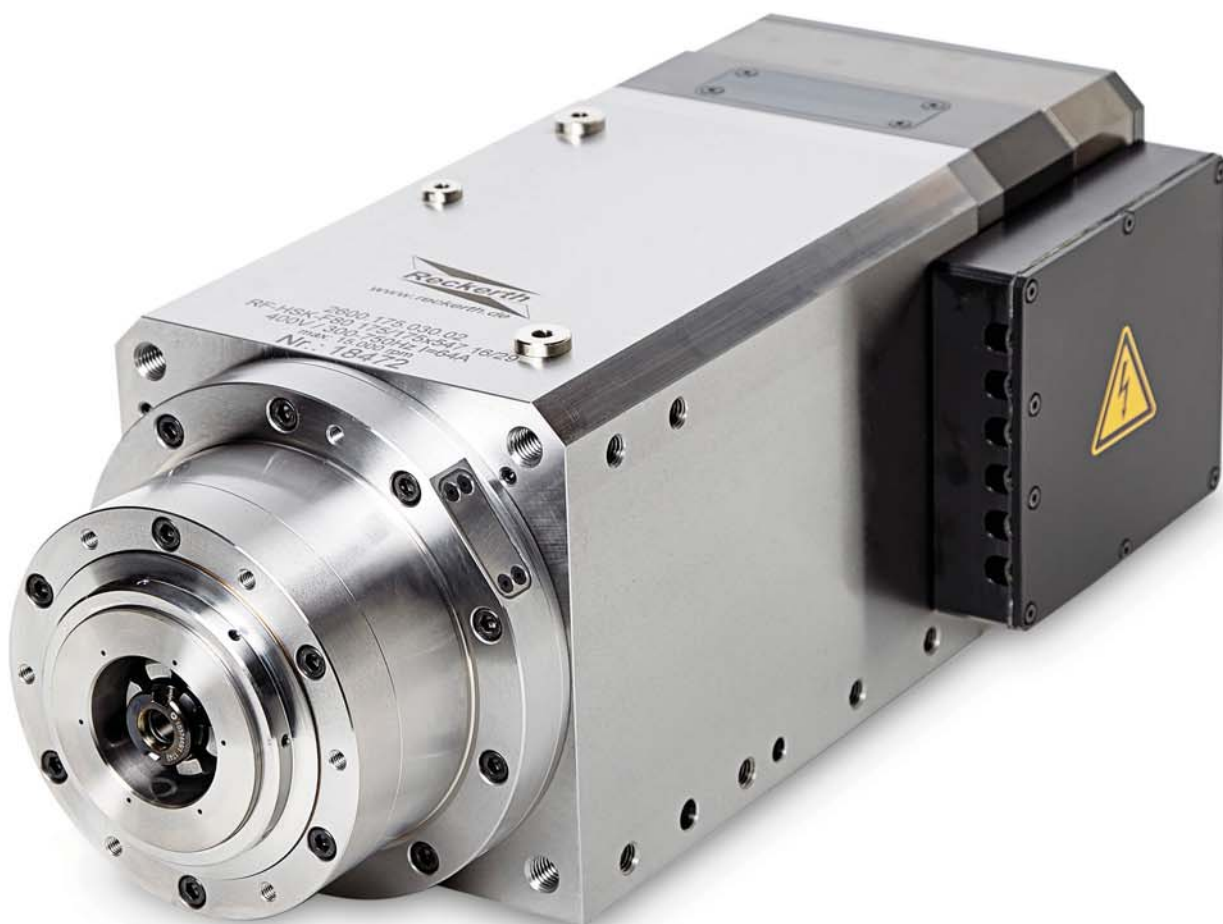


Product catalogue



SPIN YOUR SUCCESS



The Company

Hugo Reckerth GmbH is a family-owned business with a long history in Filderstadt-Bonlanden. We develop and manufacture highly precise spindles for milling, drilling, turning and grinding machines utilized in wood, plastic and metal processing commercial applications. With more than 30 years of experience we are one of the international quality providers in the spindle manufacturing industry.



Since 2024, Hugo Reckerth GmbH has been a member of the new Spindle Masters group of companies, which stands for high-tech spindle solutions!



Spindle Masters brings together three renowned specialists in spindle technology:

- Hugo Reckerth GmbH (70794 Filderstadt, Germany) www.reckerth.de
- MB Spindle Technology GmbH (63934 Röllbach, Germany) www.mb-spindle.com
- RPM Technologie (25037 Pontoglio, Italy) www.rpmtecnologie.com



This concentrated expertise promises pioneering innovations and first-class solutions.

Spindle Masters is backed by experienced and innovative teams that specialize in the development and manufacture of motor, belt, dressing and special spindles. As internationally renowned quality suppliers, all three companies together offer a wide range of services, including standardized model series as well as tailor-made and future-oriented solutions.

By working together within the group, the individual companies can continue to operate flexibly and efficiently, while at the same time benefiting from an expanded pool of expertise.

These synergies enable Spindle Masters to offer an even broader product range and present customers with a comprehensive selection of high-quality spindle solutions.

Hugo Reckerth GmbH is managed under one roof with BEST GmbH. BEST is a company that specialises in axial clamping technology. In addition to mechanical, pneumatic and hydraulic centric vices, the product range also includes a comprehensive range of jaws, as well as a mechanical zero-point system (more information can be found on page 42 or at www.best-spanntechnik.de).



Quality, reliability and punctuality are the top priorities of Reckerth and BEST. The achievement of these objectives is supported by our quality management system, which is certified to DIN EN ISO 9001: 2015 standards. These are applied in all areas of our business operations, from development, design, and production right through to sales. These are implemented and put into practice by our team of highly qualified employees.

We are proud to present to you our new catalogue, which will give you a comprehensive overview of our product variety.

Our product range includes not only electric and motor spindles, we also manufacture belt spindles, motors for test bays and drilling oil feed apparatus (BOZA).

In addition to our standardised model series, we also develop custom as well as future-oriented solutions for you. Even if you only need a relatively small quantity, we are your partner for customised solutions and innovative spindles. Our technology puts us on the technology leader board, while our mid-size operation enables us to rapidly respond to your individual requests.

Our state-of-the-art production equipment puts us in a position to flexibly respond to new market requirements.



If you are interested in finding out more about the services of the Hugo Reckerth GmbH, if you have questions, or you would like a quotation or need a consultation appointment, please don't hesitate to contact us. We at Reckerth will gladly help you with all matters relating to clamping technology and can provide you with expert help. You can reach us by telephone, fax or email. We will respond to you immediately and discuss everything with you in a personal consultation.

Hugo Reckerth GmbH
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info@reckerth.de
www.reckerth.de



Company headquarters

Our headquarters are located in Filderstadt, near Stuttgart airport. We are nationally and internationally well-positioned as a medium-size, highly specialized, and successful technology company.



Our spindle installation



- Even if you only need a relatively small quantity, we are your partner for customised solutions and innovative spindles

Assembly

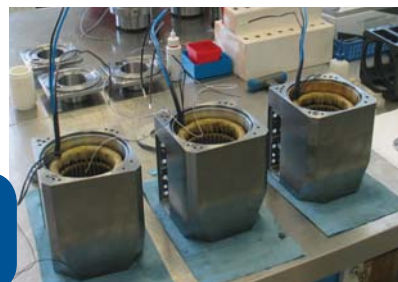
Assembly order

- Our standard production batch sizes are between 1-5 units



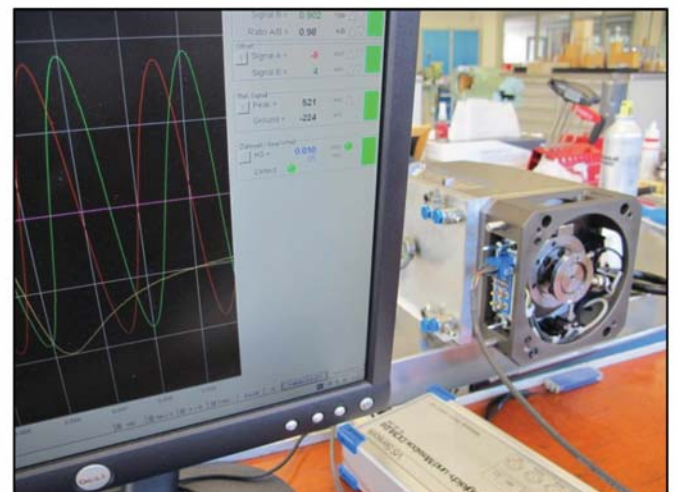
- To achieve optimal functions, rings are filed to fit during the final installation

Trimming grinding shop



Technical expertise

All individual rotation-symmetrical components are checked and calibrated utilizing state-of-the-art measuring technology. In our test bay, each spindle is operated up to the maximum speed. Vibrations are reduced to a minimum through dynamic weight balancing. The measuring protocol documents values such as true-running accuracy, feed-in power, vibration behaviour, and electrical settings (e.g. of the encoder).



Encoder setting

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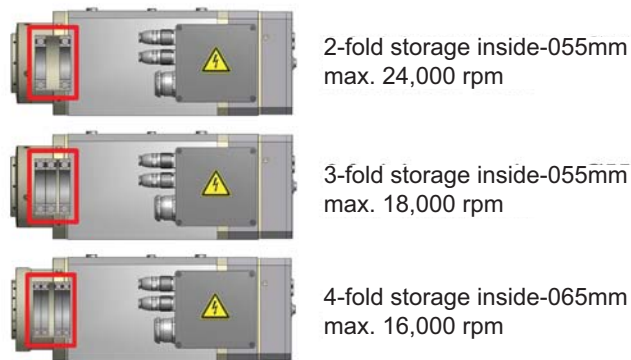
1. Motor spindles with SK and HSK interface

Our range of motor spindles has undergone a great variety of developments over the last few years. The product range consists of models for grinding, drilling and milling applications, whose strengths relate above all to high-speed processing.

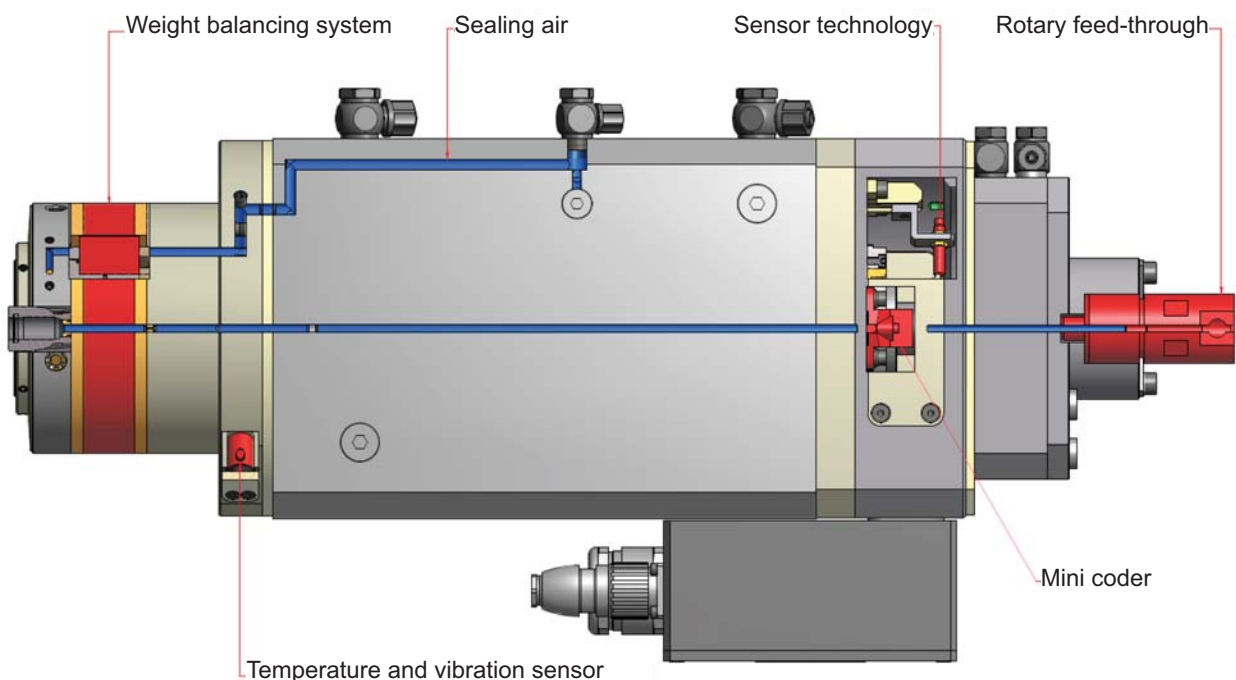
A large selection of product options and additional options is available.

Spindle attributes:

- Compact design
 - Asynchronous or synchronous motor
 - Cylindrical or prismatic housing
 - Manual or automatic tool changer
 - Water or air cooling
 - Sealing air to protect the inside of the spindle against contamination
 - High true-running accuracy in the taper ≤ 0.002 mm
 - Ball bearing with continuous grease lubrication or oil-air lubrication system
- Rigidity variation options (adapted to the customer's speed requirements):



- Optional accessories such as for example tool sensors, mini coders, rotary feed-through, temperature and vibration sensor as well as automatic weight balancing system:



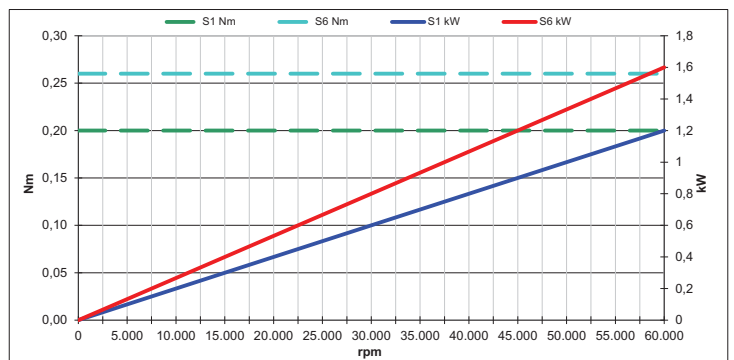
1.1.1 RF-IS010 70/70x269 60/1.2

Processing type:	Milling, drilling
Tool interface:	SK-10
Weight:	approx. 6 kg
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Thermal sensor:	PTC / PT1000
Cooling:	Water

Encoder:	TTL or sin/cos 1 vss
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Motor type:	asynchronous
Max. rotational speed:	60,000 rpm
Nominal rotational speed:	58,200 rpm
Max. output S1:	1.2 kW
Max. torque S1:	0.2 Nm
Max. voltage:	350 V
Max. current:	3.4 A
Max. frequency:	1000 Hz



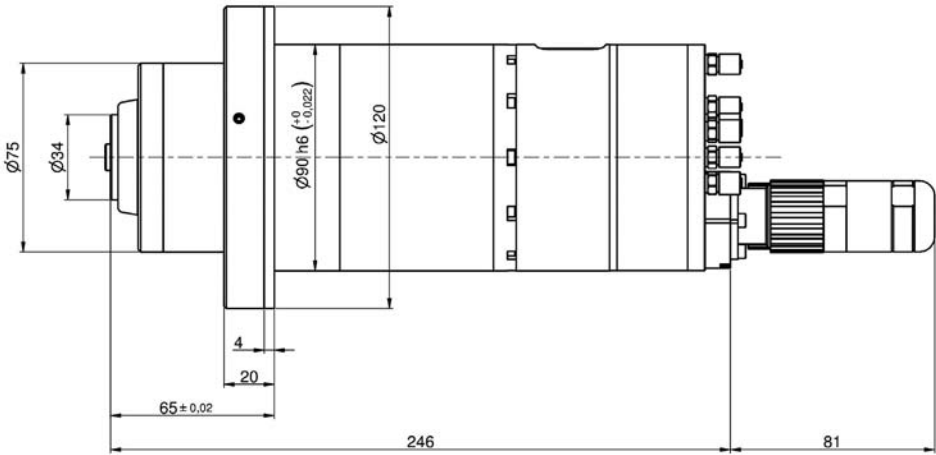
1.1.2 RF-HSK-E25 90/246

Item no. 2650.090.001



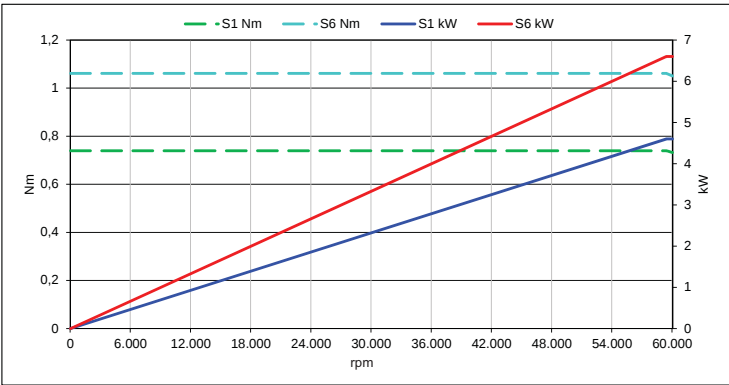
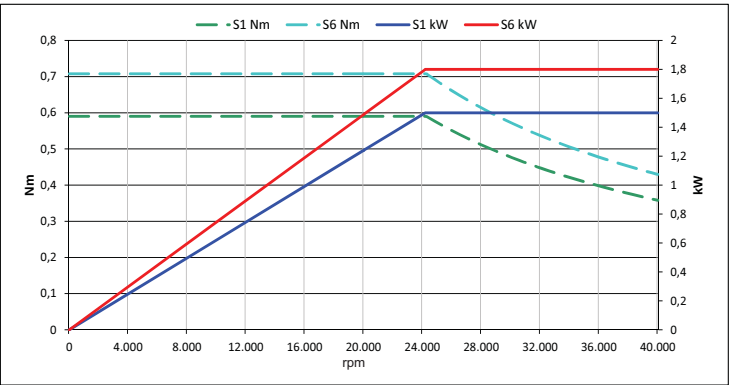
Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E25
Weight:	9 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC
Cooling:	Water



Motor data:

Motor type:	asynchronous	asynchronous
Max. rotational speed:	40,000 rpm	60,000 rpm
Nominal rotational speed:	24,200 rpm	59,400 rpm
Max. output S1:	1.5 kW	4.6 kW
Max. torque S1:	0.59 Nm	0.74 Nm
Max. voltage:	380 V	380 V
Max. current:	3.5 A	10 A
Max. frequency:	667 Hz	1000 Hz



1.2 HSK32

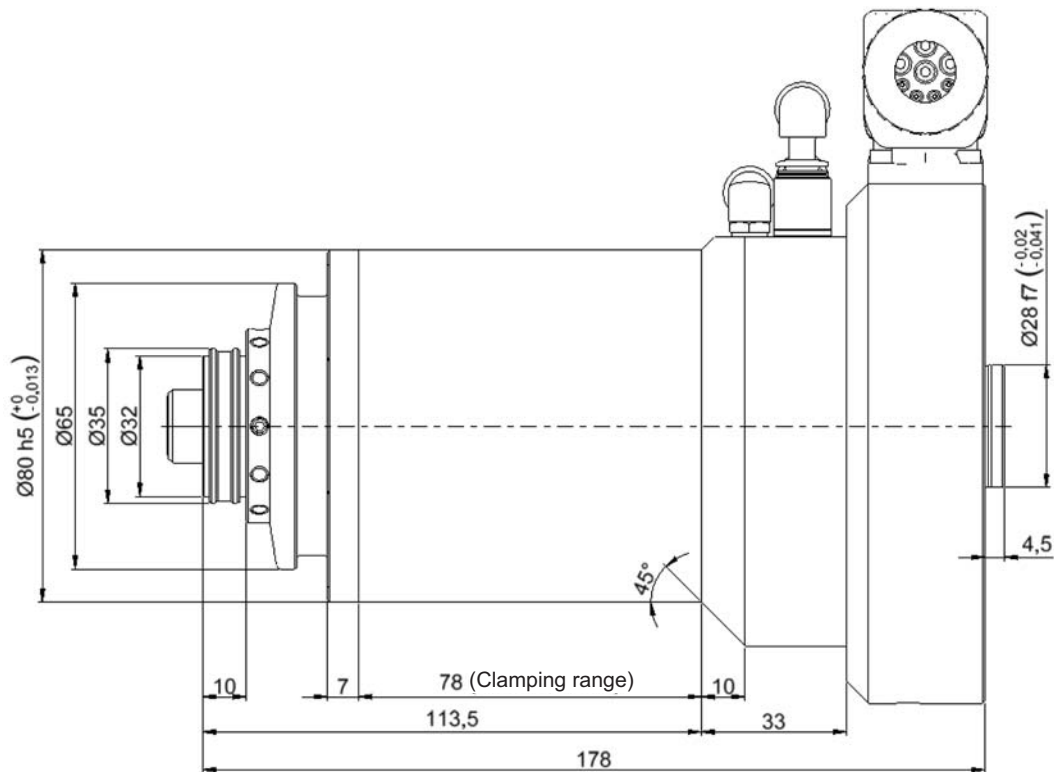
1.2.1 HSK-C32 80/126x178 50/3

Item no. 2590.080.001



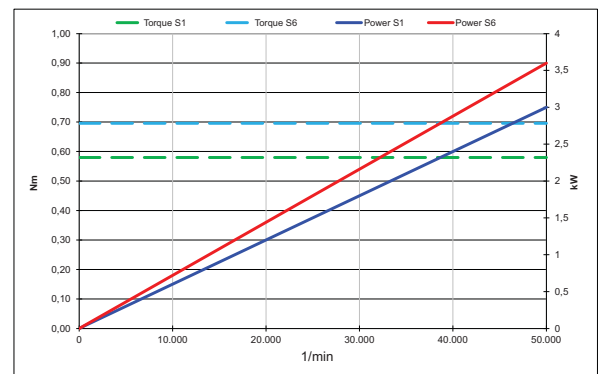
Spindle attributes:

Processing type:	Dressing spindle
Tool interface:	HSK-C32
Weight:	approx. 8 kg
Bearing lubrication:	Grease lubrication
Release unit:	Manual
Thermal sensor:	PTC
Cooling:	Water



Motor data:

Motor type:	asynchronous
Max. rotational speed:	50,000 rpm
Nominal rotational speed:	50,000 rpm
Max. output S1:	3 kW
Max. torque S1:	0.58 Nm
Max. voltage:	380 V
Max. current:	8 A
Max. frequency:	1667 Hz



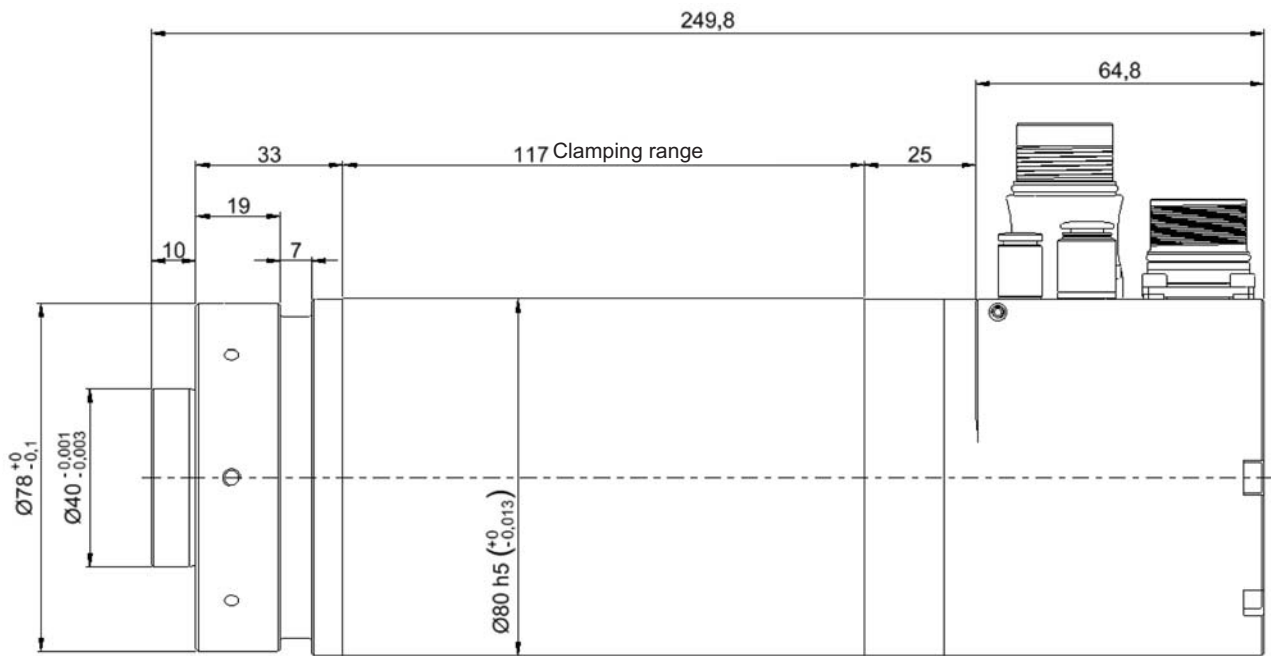
1.2.2 HSK-C32 80/126x178 50/3

Item no. 2590.080.002



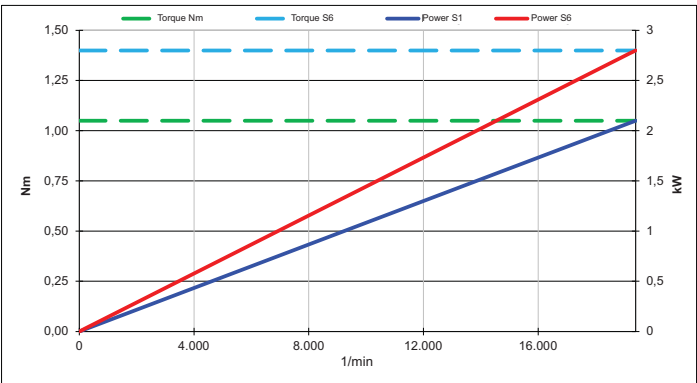
Spindle attributes:

Processing type:	Dressing spindle
Tool interface:	HSK-C32 or flange holder
Weight:	approx. 6.5 kg
Bearing lubrication:	Grease lubrication
Release unit:	Manual
Thermal sensor:	PTC / PT1000
Cooling:	None



Motor data:

Motor type:	asynchronous
Max. rotational speed:	19,400 rpm
Nominal rotational speed:	19,400 rpm
Max. output S1:	2.1 kW
Max. torque S1:	1.05 Nm
Max. voltage:	380 V
Max. current:	5.5 A
Max. frequency:	667 Hz



1.2.3 RF-HSK-F40 125/125x360

Item no. 2600.125.002/003

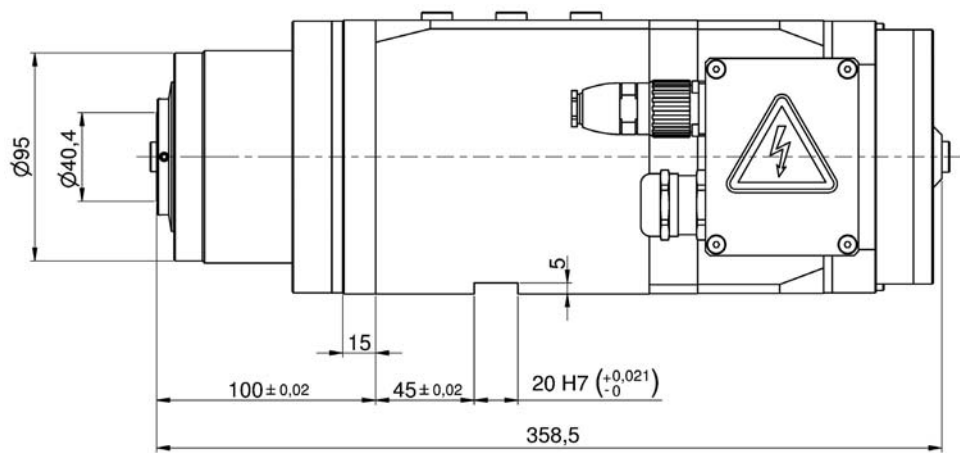


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E32/-F40
Weight:	27 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

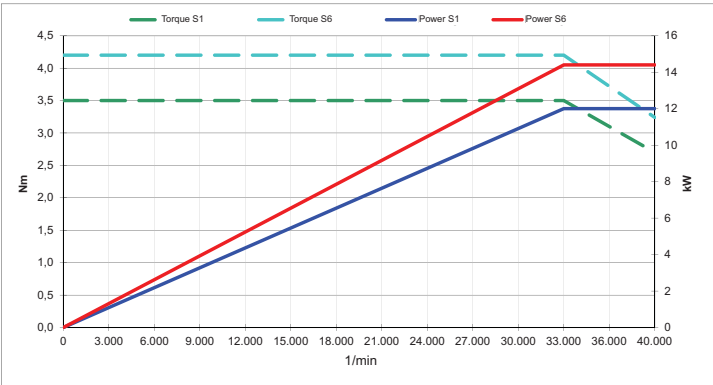
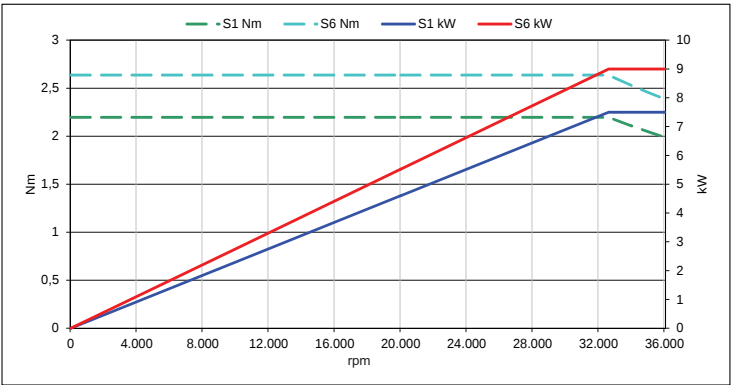
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature monitoring



Motor data:

Motor type:	asynchronous	asynchronous
Max. rotational speed:	36,000 rpm	40,000 rpm
Nominal rotational speed:	32,600 rpm	33,000 rpm
Max. output S1:	7.5 kW	12 kW
Max. torque S1:	2.2 Nm	3.45 Nm
Max. voltage:	380 V	380 V
Max. current:	30 A	30 A
Max. frequency:	1200 Hz	1334 Hz



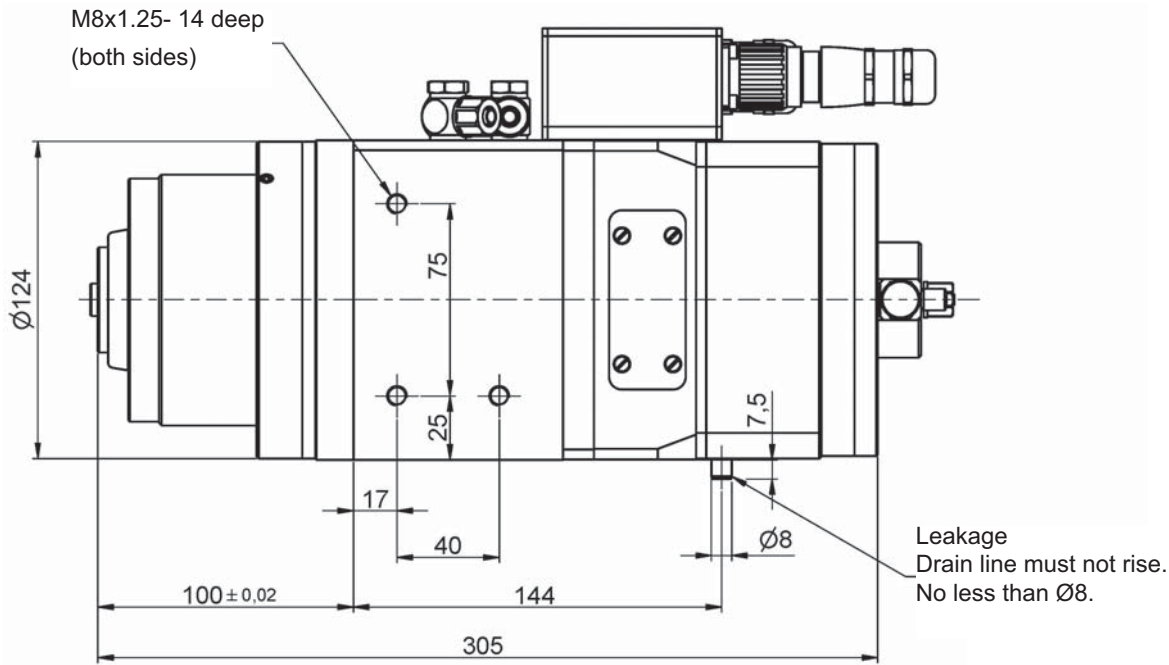
1.2.4 RF-HSK-F40 125/125x305

Item no. 2600.125.006



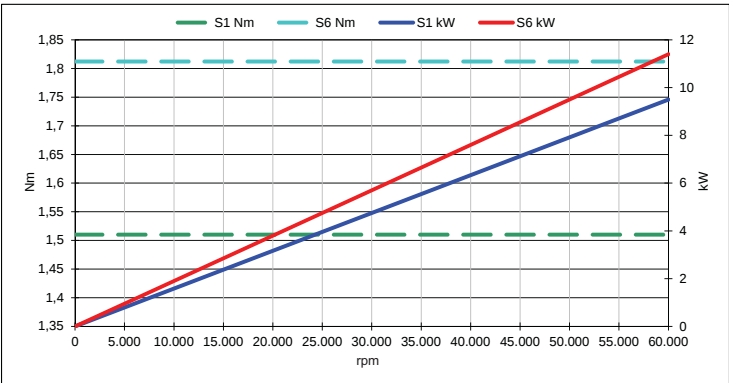
Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E32/-F40
Weight:	22 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC
Cooling:	Water



Motor data:

Motor type:	asynchronous
Max. rotational speed:	60,000 rpm
Nominal rotational speed:	60,000 rpm
Max. output S1:	9 kW
Max. torque S1:	1.51 Nm
Max. voltage:	380 V
Max. current:	20 A
Max. frequency:	1,000 Hz



1.2.5 RF-HSK-F40 120x415

Item no. 2650.120.002

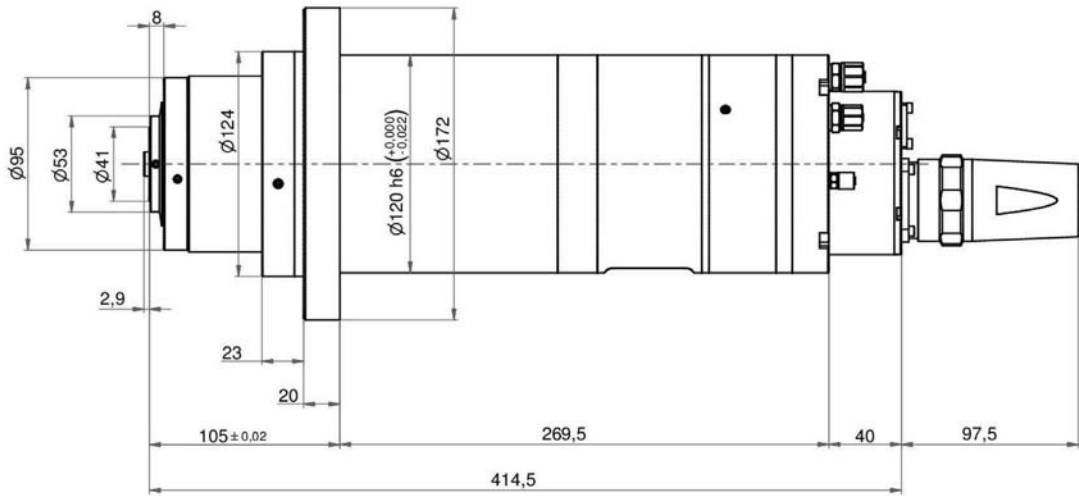


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E32/-F40
Weight:	23 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

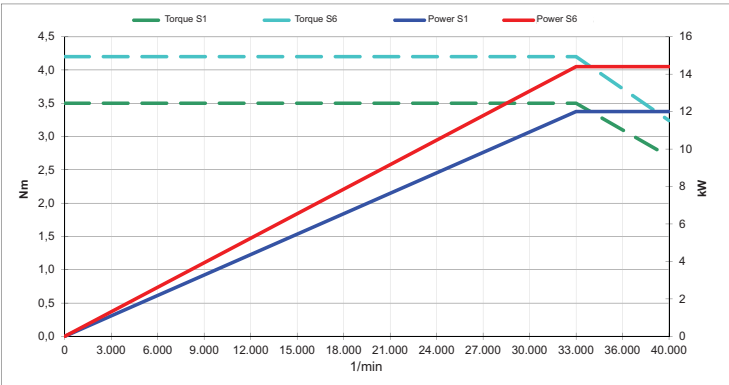
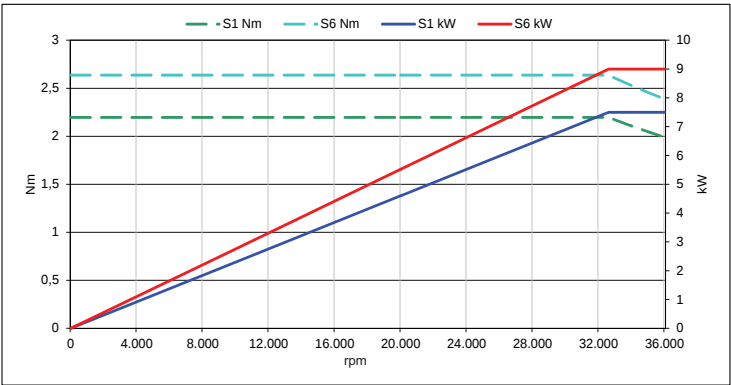
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous	asynchronous
Max. rotational speed:	36,000 rpm	40,000 rpm
Nominal rotational speed:	32,600 rpm	33,000 rpm
Max. output S1:	7.5 kW	12 kW
Max. torque S1:	2.2 Nm	3.45 Nm
Max. voltage:	380 V	380 V
Max. current:	30 A	30 A
Max. frequency:	1200 Hz	1334 Hz



1.3 HSK40

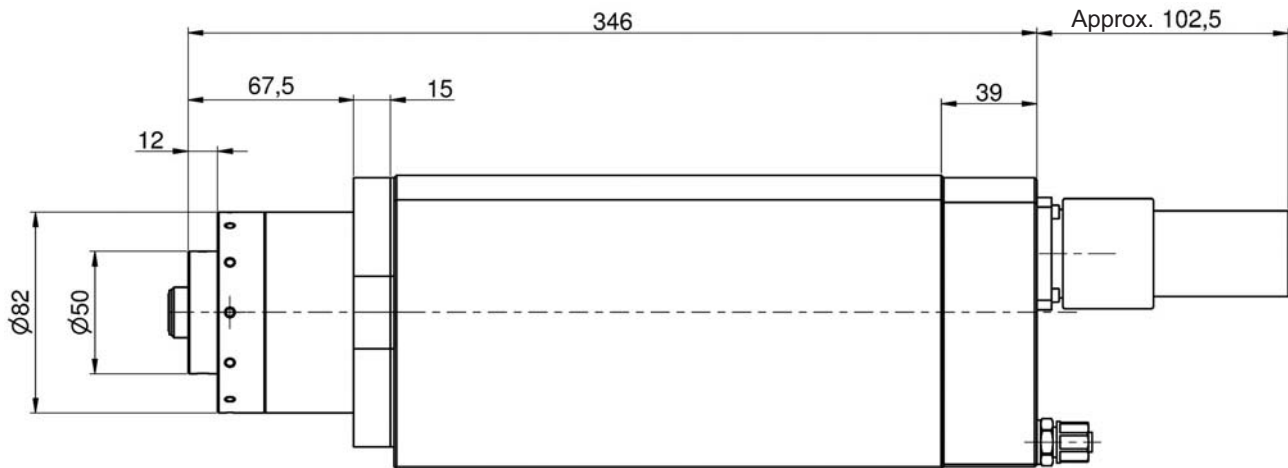
1.3.1 RF-HSK-C40 110/120x350

Item no. 2500.110.004



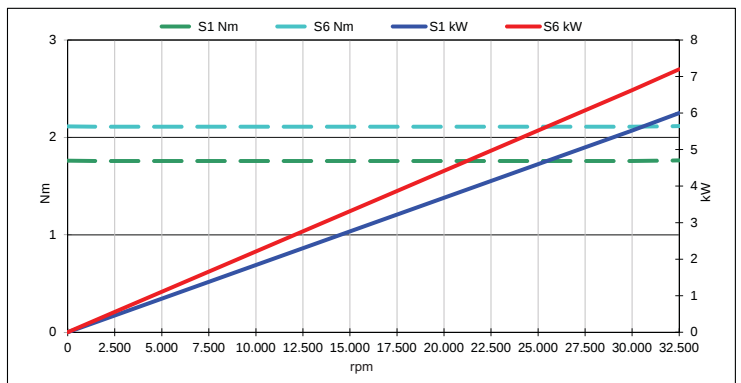
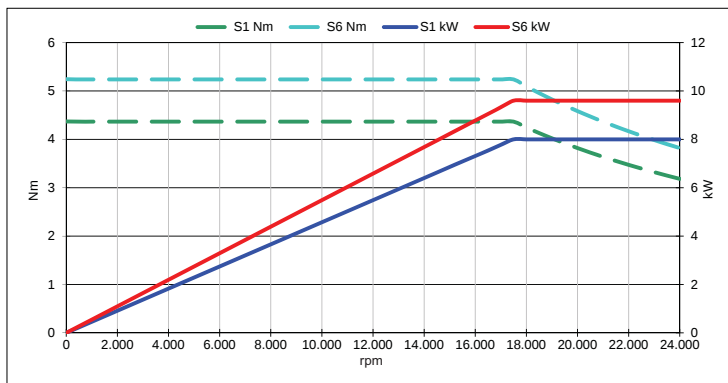
Spindle attributes:

Processing type:	Milling
Tool interface:	HSK-C40
Weight:	18 kg
Bearing lubrication:	Grease lubrication
Release unit:	Manual
Thermal sensor:	PTC
Cooling:	Water



Motor data:

Motor type:	asynchronous	asynchronous
Max. rotational speed:	24,000 rpm	32,500 rpm
Nominal rotational speed:	17,000 rpm	32,500 rpm
Max. output S1:	8 kW	6 kW
Max. torque S1:	4.37 Nm	1.76 Nm
Max. voltage:	350 V	380 V
Max. current:	20 A	15 A
Max. frequency:	800 Hz	1,100 Hz



1.3.2 RF-HSK-F50 140/140x385

Item no. 2600.140.001

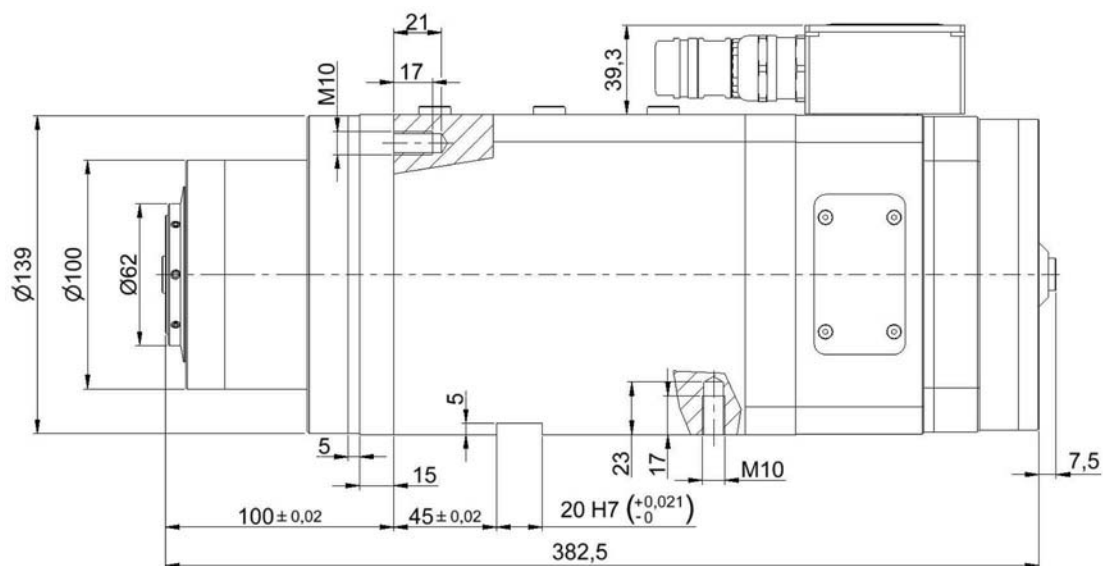


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E40/-F50
Weight:	35 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC
Cooling:	Water

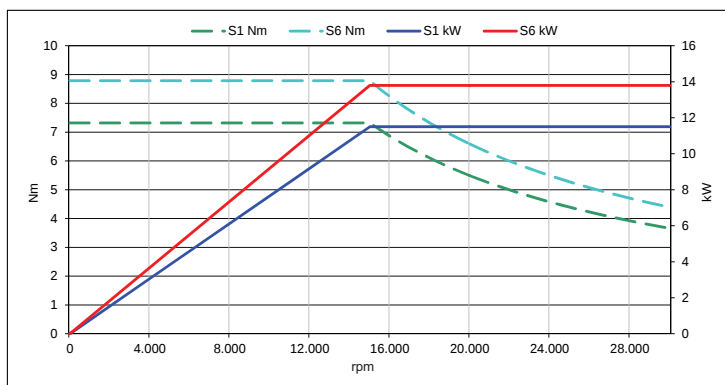
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous
Max. rotational speed:	30,000 rpm
Nominal rotational speed:	15,000 rpm
Max. output S1:	11.5 kW
Max. torque S1:	7.32 Nm
Max. voltage:	380 V
Max. current:	34 A
Max. frequency:	1,000 Hz



1.4 SK40/ HSK50

1.4.1 RF-HSK-F63 125/125x430

Item no. 2600.125.010

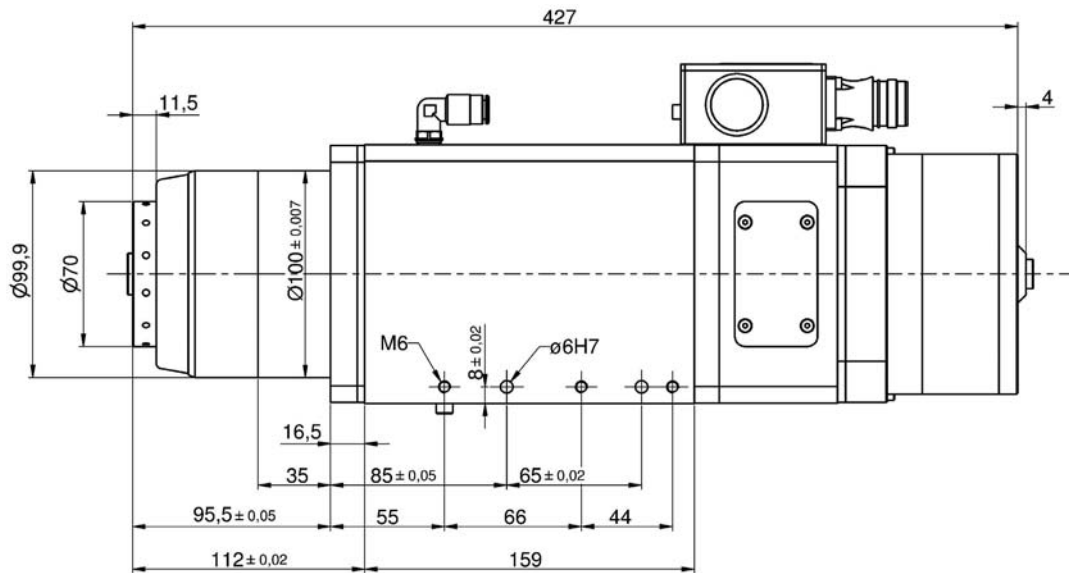


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50/-F63
Weight:	30 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC
Cooling:	Water/air

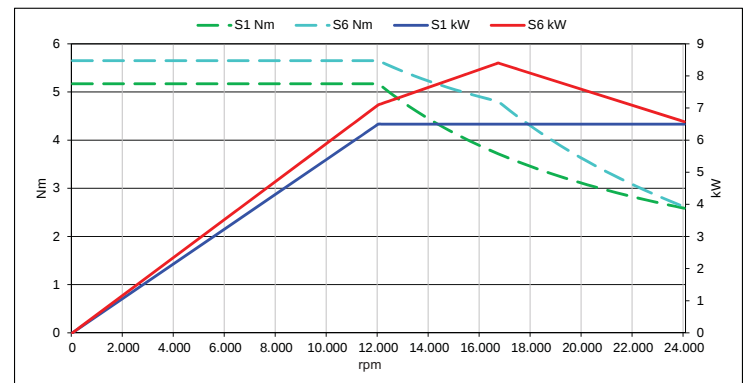
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous
Max. rotational speed:	24,000 rpm
Nominal rotational speed:	12,000 rpm
Max. output S1:	6.5 kW
Max. torque S1:	5.17 Nm
Max. voltage:	380 V
Max. current:	20 A
Max. frequency:	800 Hz



1.4.2 RF-HSK-F63 140/140x328

Item no. 2600.140.002/003/004



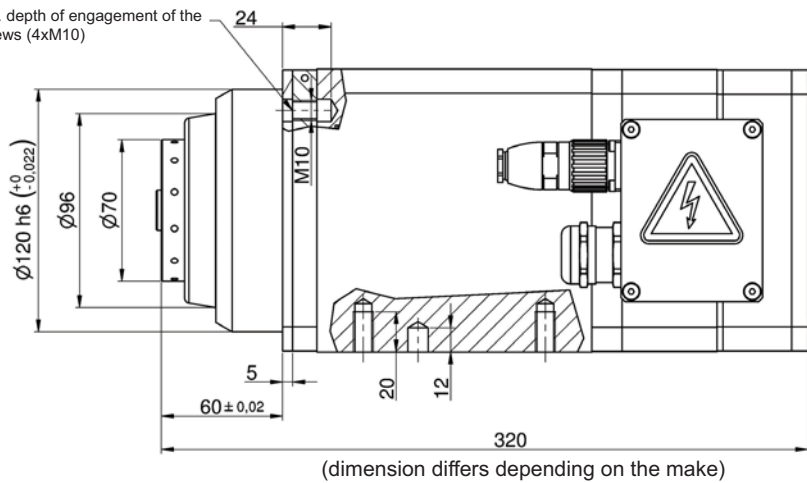
Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50/-F63
Weight:	23 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

Optional additional functions:

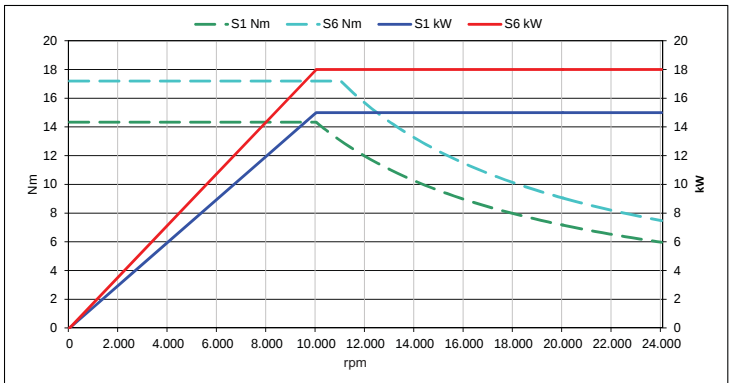
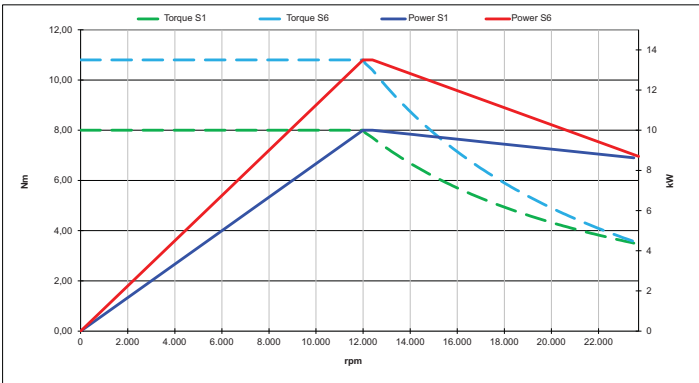
Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature and/or bearing state monitoring
Rotary feed-through:	80 bar (cooling lubricant) 5 bar (air up to max. 10,000 rpm)

22 mm = max. depth of engagement of the assembly screws (4xM10)



Motor data:

Motor type:	asynchronous	synchronous
Max. rotational speed:	24,000 rpm	24,000 rpm
Nominal rotational speed:	10,000 rpm	10,000 rpm
Max. output S1:	10 kW	15 kW
Max. torque S1:	8 Nm	14.33 Nm
Max. voltage:	400 V	412 V
Max. current:	22 A	40 A
Max. frequency:	800 Hz	800 Hz



1.4.3 RF-HSK-F63 140/140x328

Item no. 2600.150.026

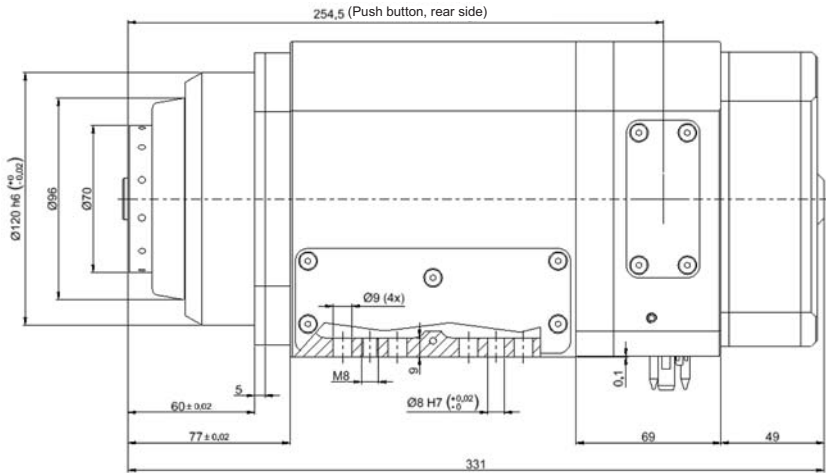


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-F63
Weight:	approx. 30 kg
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Thermal sensor:	PTC/PT1000
Cooling:	Water

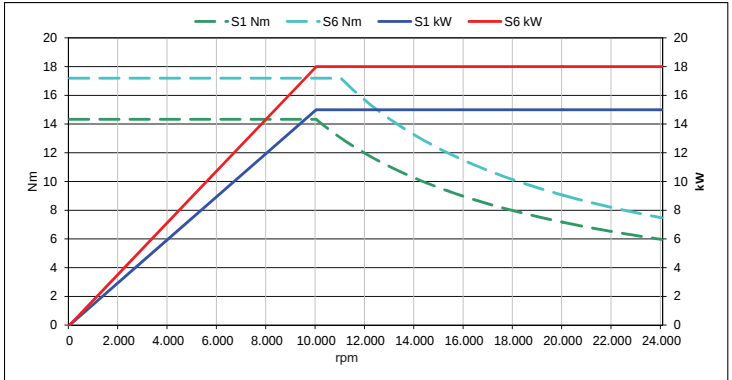
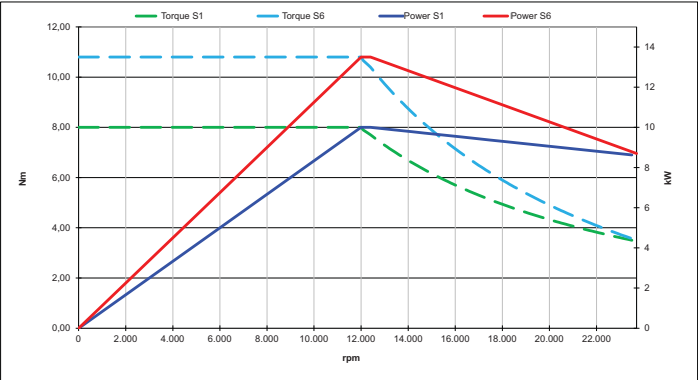
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature and/or bearing state monitoring
Rotary feed-through:	80 bar (cooling lubricant) 5 bar (air up to max. 10,000 rpm)



Motor data:

Motor type:	asynchronous	synchronous
Max. rotational speed:	24,000 rpm	24,000 rpm
Nominal rotational speed:	10,000 rpm	10,000 rpm
Max. output S1:	10 kW	15 kW
Max. torque S1:	8 Nm	14.33 Nm
Max. voltage:	400 V	412 V
Max. current:	22 A	40 A
Max. frequency:	800 Hz	800 Hz



1.4.4 RF-HSK-F63 150/150x385

Item no. 2600.150.023/025

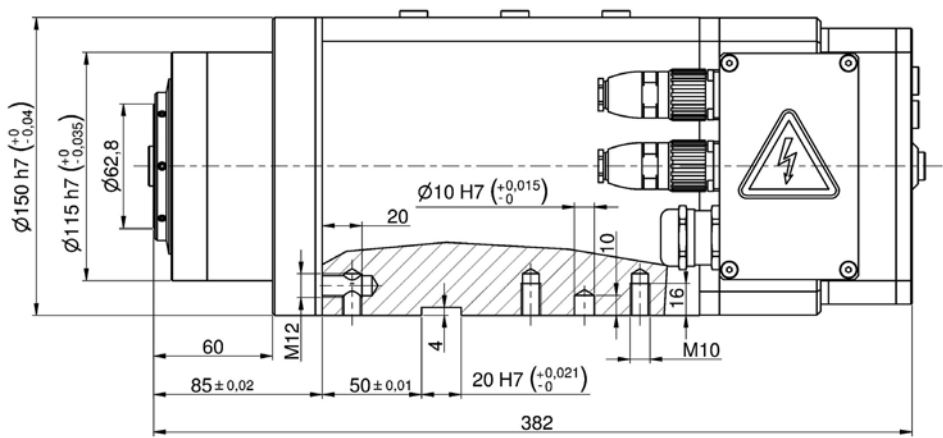


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50/-F63
Weight:	45 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

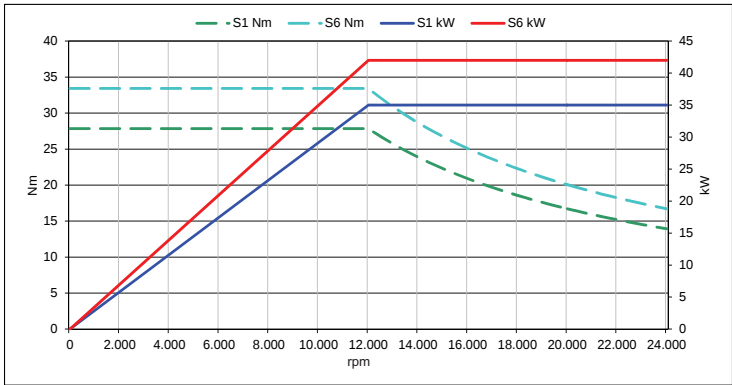
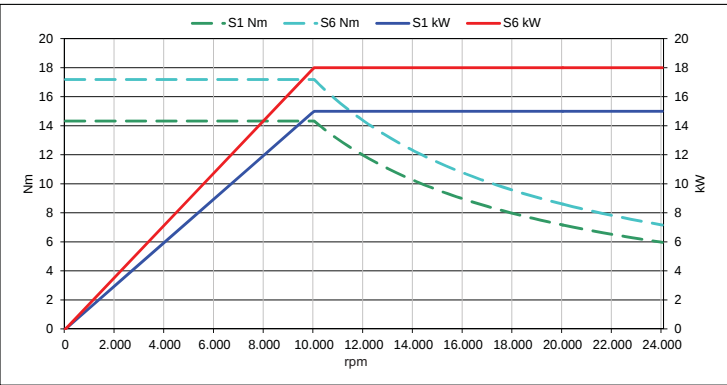
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature monitoring
Rotary feed-through:	80 bar (cooling lubricant) 5 bar (air up to max. 10,000 rpm)



Motor data:

Motor type:	asynchronous	synchronous
Max. rotational speed:	24,000 rpm	24,000 rpm
Nominal rotational speed:	10,000 rpm	12,000 rpm
Max. output S1:	15 kW	35 kW
Max. torque S1:	14.325 Nm	27.85 Nm
Max. voltage:	380 V	465 V
Max. current:	38 A	77 A
Max. frequency:	800 Hz	800 Hz

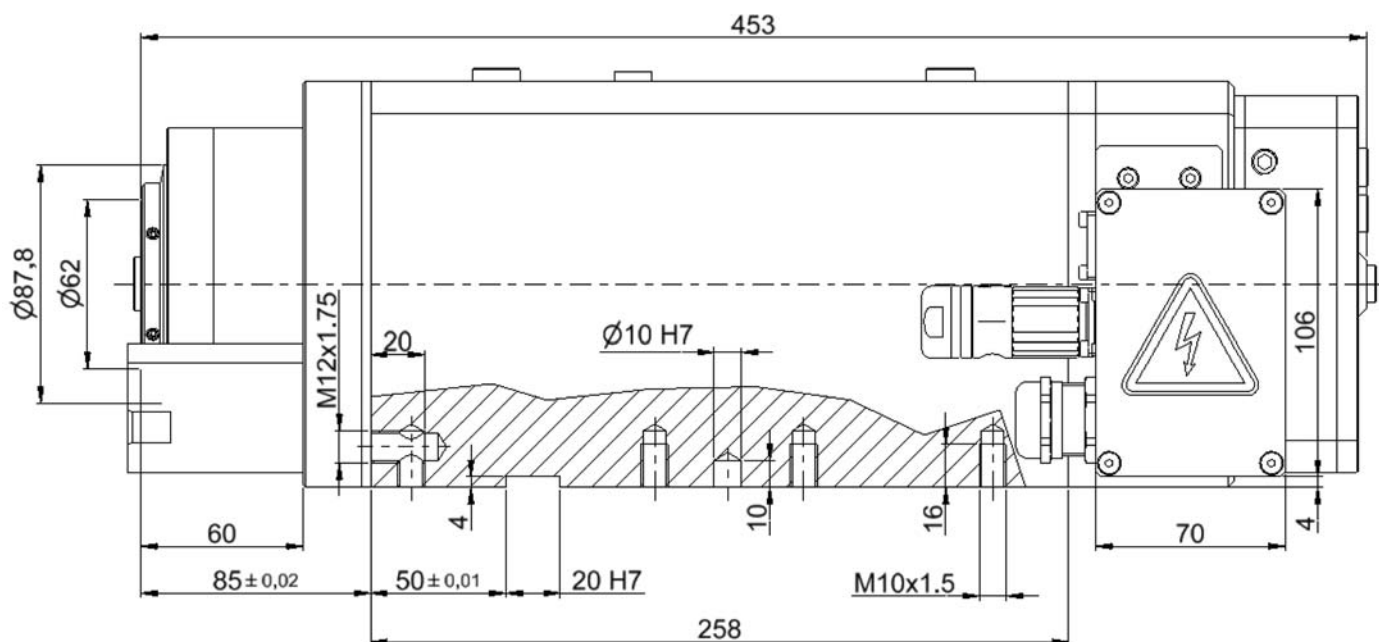


Item no. 2600.150.028/029

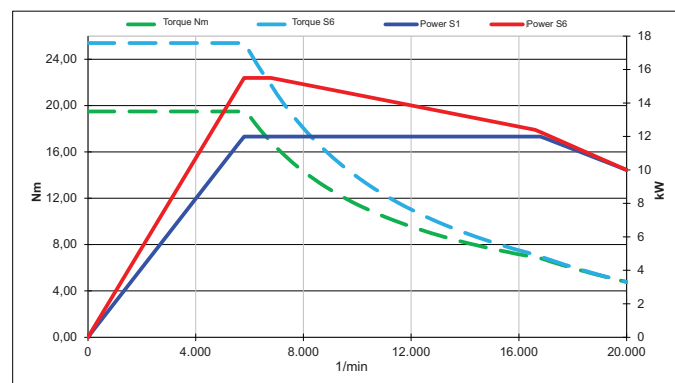


Processing type:	Milling, drilling
Tool interface:	HSK-F-63 / SK-40
Weight:	approx. 51 kg
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Thermal sensor:	PTC / PT1000
Cooling:	Water

Encoder:	TTL or sin/cos 1 vss
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Motor type:	asynchronous
Max. rotational speed:	20,000 rpm
Nominal rotational speed:	6,800 rpm
Max. output S1:	12 kW
Max. torque S1:	19.5 Nm
Max. voltage:	380 V
Max. current:	31 A
Max. frequency:	667 Hz



1.4.6 RF-HSK-E50 170/175x395

Item no. 2600.170.002/008

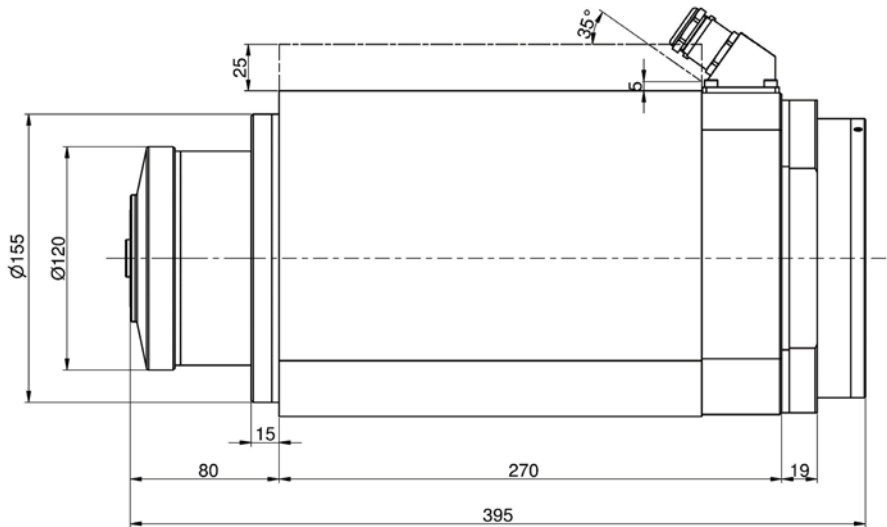


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50
Weight:	58 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

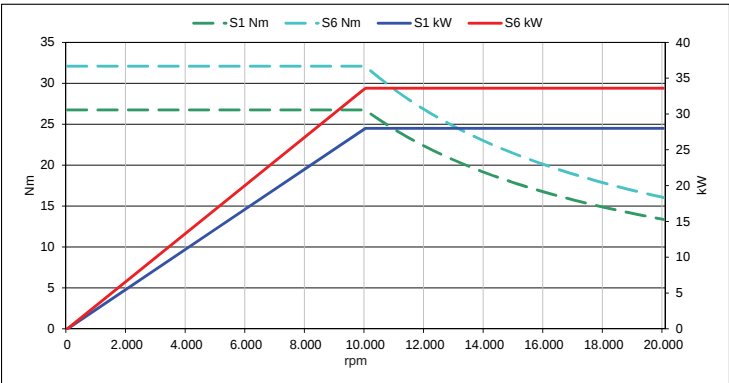
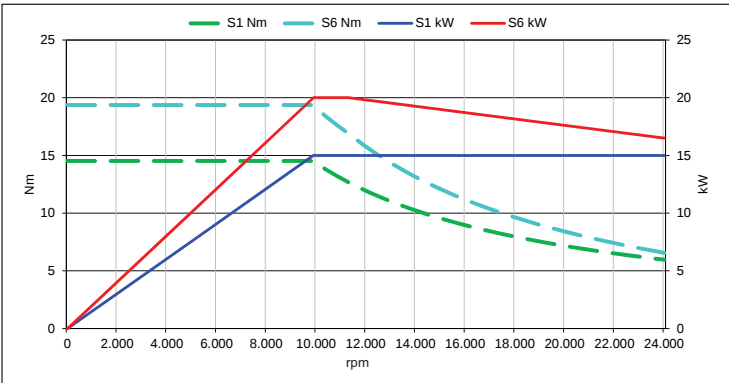
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous	synchronous
Max. rotational speed:	20,000 rpm	20,000 rpm
Nominal rotational speed:	10,000 rpm	10,000 rpm
Max. output S1:	15 kW	28 kW
Max. torque S1:	14.52 Nm	26.74 Nm
Max. voltage:	380 V	433 V
Max. current:	38 A	61 A
Max. frequency:	667 Hz	667 Hz



1.4.7 RF-HSK-E50 170/175x411

Item no. 2600.170.007

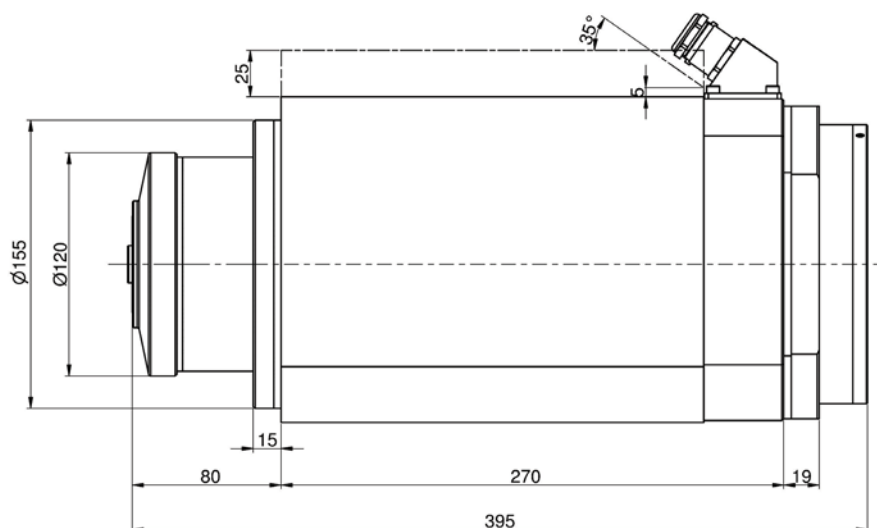


Spindle attributes:

Processing type:	Grinding
Tool interface:	HSK-E50
Weight:	56 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Oil/air
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

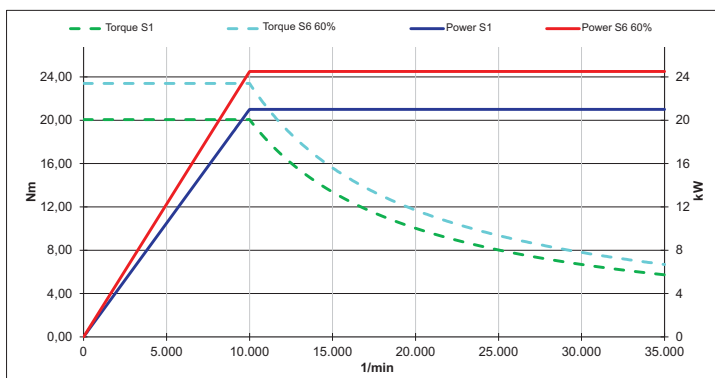
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	synchronous
Max. rotational speed:	35,000 rpm
Nominal rotational speed:	10,000 rpm
Max. output S1:	21 kW
Max. torque S1:	20 Nm
Max. voltage:	435 V
Max. current:	95 A
Max. frequency:	1,167 Hz



1.4.8 RF-HSK-F63 175/175x450

Item no. 2600.175.004

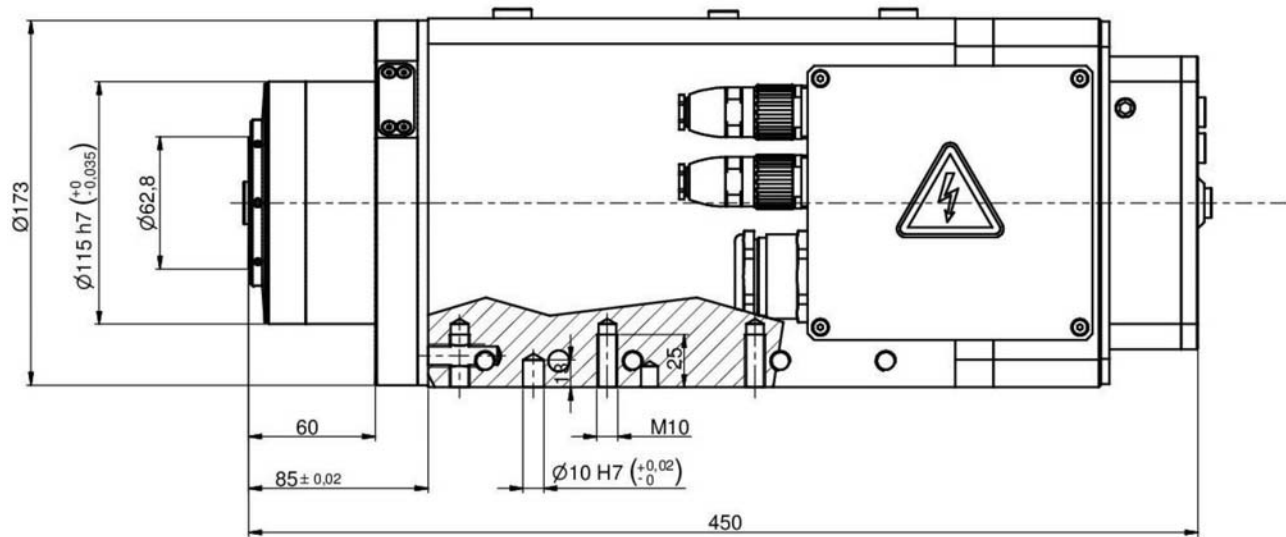


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50/-F63
Weight:	70 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

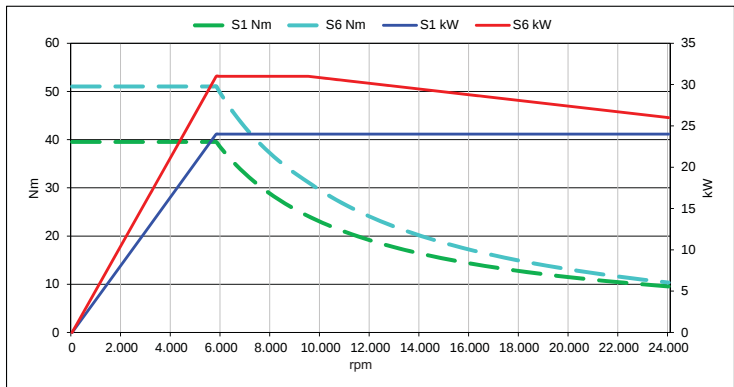
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous
Max. rotational speed:	24,000 rpm
Nominal rotational speed:	5,850 rpm
Max. output S1:	24 kW
Max. torque S1:	39.11 Nm
Max. voltage:	380 V
Max. current:	82 A
Max. frequency:	800 Hz



1.4.9 RF-HSK-F63 180/185x450

Item no. 2600.180.002

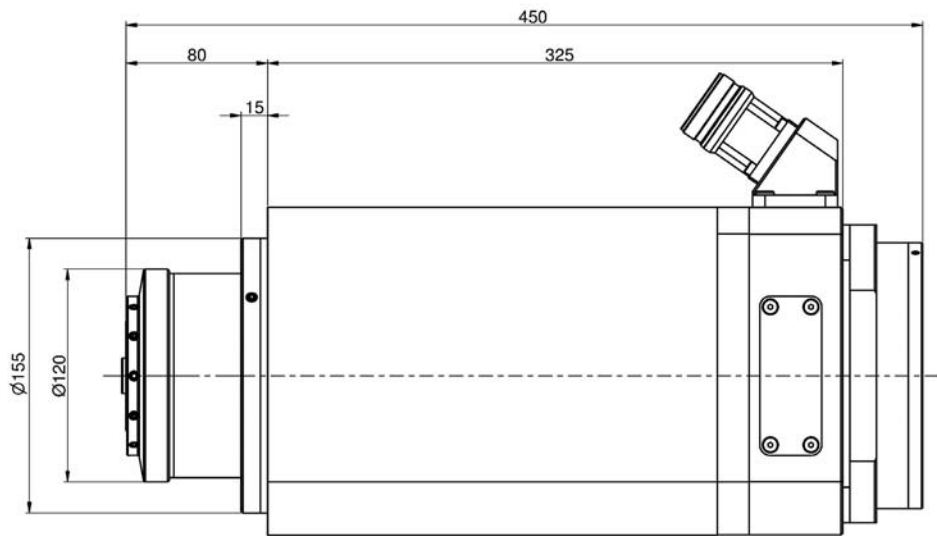


Spindle attributes:

Processing type:	Grinding
Tool interface:	HSK-E50/-F63
Weight:	72 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

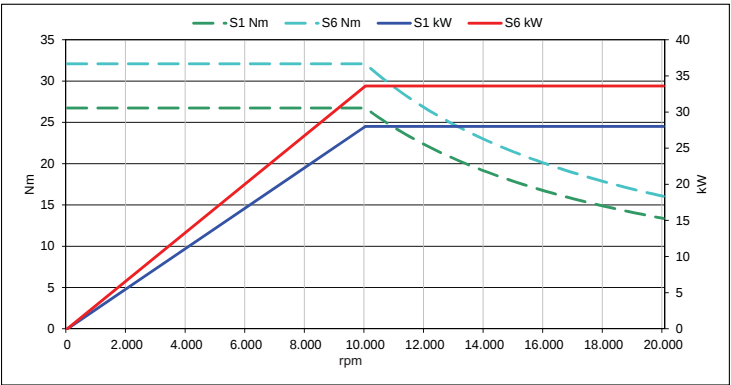
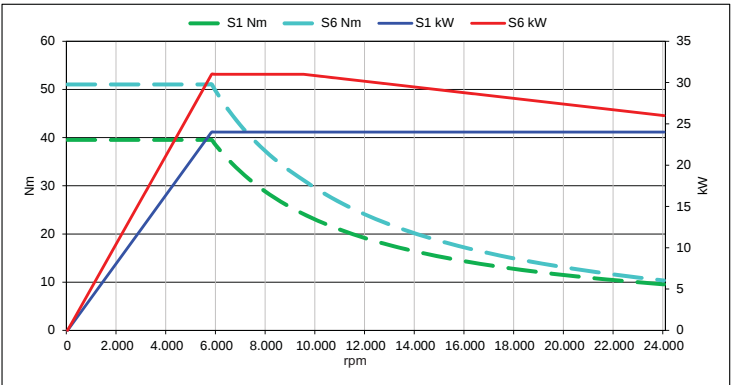
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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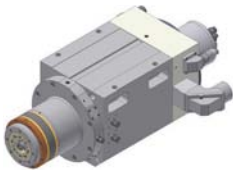
Motor data:

Motor type:	asynchronous	synchronous
Max. rotational speed:	24,000 rpm	20,000 rpm
Nominal rotational speed:	5,850 rpm	10,000 rpm
Max. output S1:	24 kW	28 kW
Max. torque S1:	39.11 kW	26.74 Nm
Max. voltage:	380 V	433 V
Max. current:	82 A	61 A
Max. frequency:	800 Hz	667 Hz



1.4.10 RF-HSK-F63 220/220x642

Item no. 2600.220.002

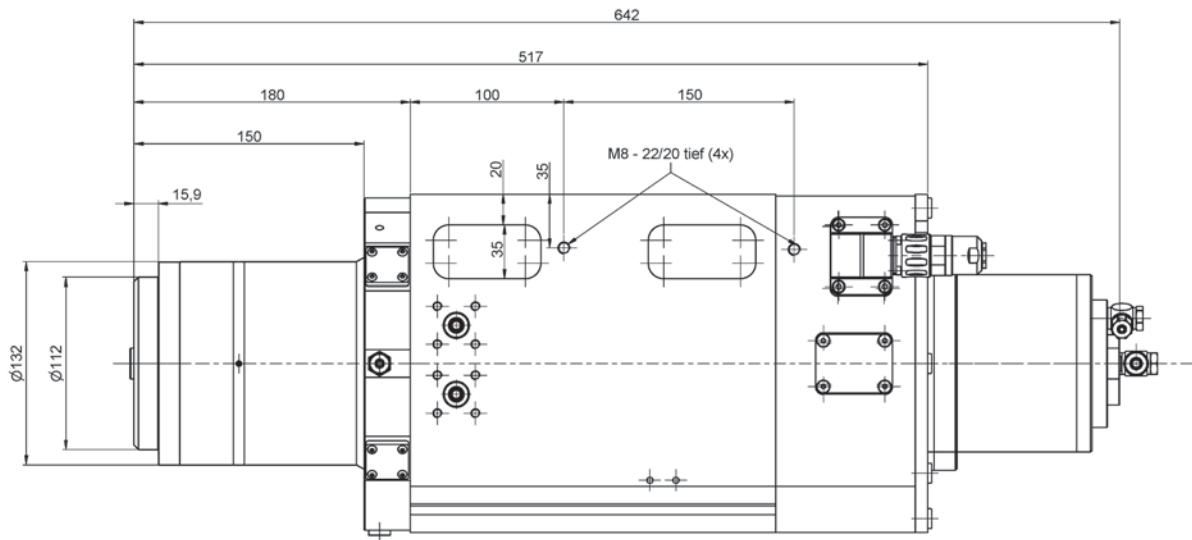


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E50/-F63
Weight:	about 125 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Hydraulic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC, KTY and NTC
Cooling:	Water

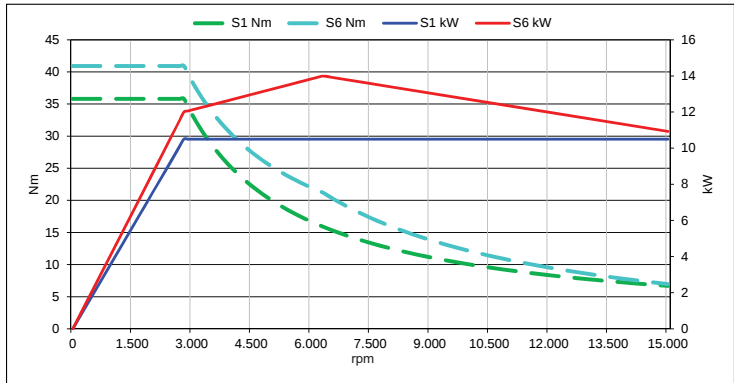
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous
Max. rotational speed:	15,000 rpm
Nominal rotational speed:	2,840 rpm
Max. output S1:	10.5 kW
Max. torque S1:	35.81 Nm
Max. voltage:	380 V
Max. current:	46 A
Max. frequency:	500 Hz



1.5 HSK63

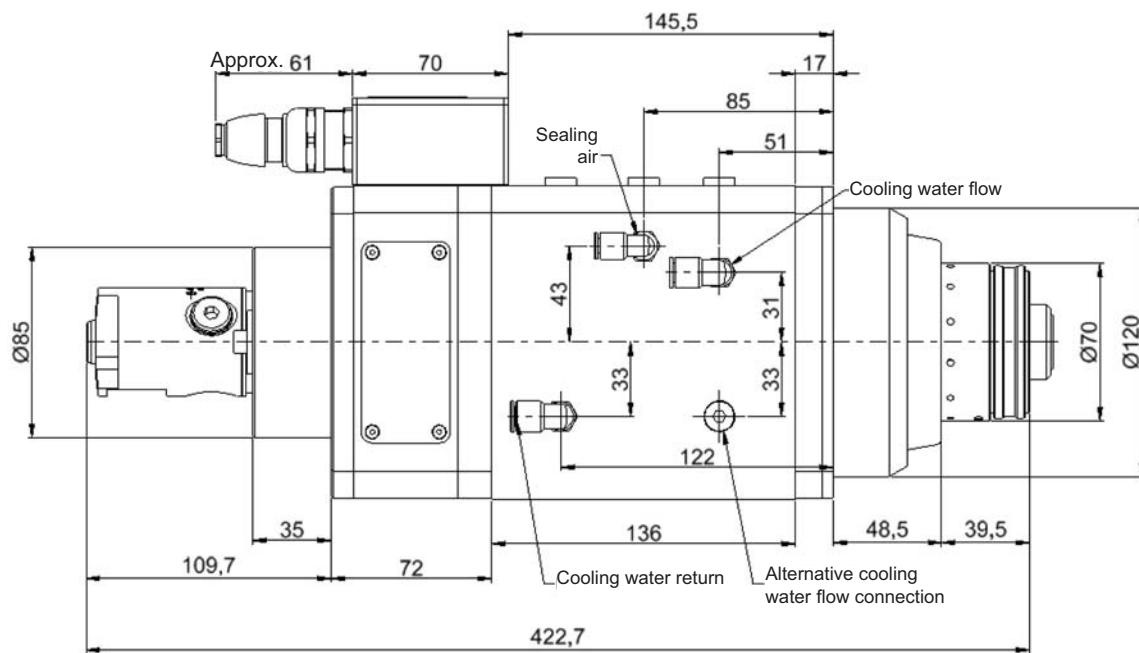
1.5.1 RF-HSK-C63 140/140x422

Item no. 2500.140.007



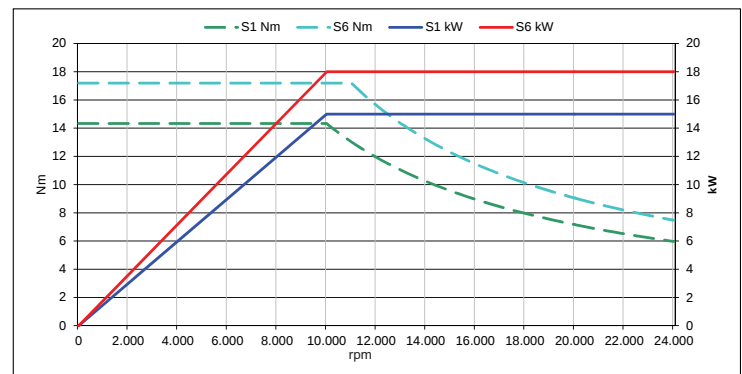
Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-C63
Weight:	approx. 32 kg
Bearing lubrication:	Grease lubrication
Release unit:	Manual
Thermal sensor:	PTC / KTY / PT1000
Cooling:	Water



Motor data:

Motor type:	synchronous
Max. rotational speed:	24,000 rpm
Nominal rotational speed:	10,000 rpm
Max. output S1:	15 kW
Max. torque S1:	14.33 Nm
Max. voltage:	412 V
Max. current:	40 A
Max. frequency:	800 Hz



1.5.2 RF-HSK-A63 140/140x368

Item no. 2600.140.009

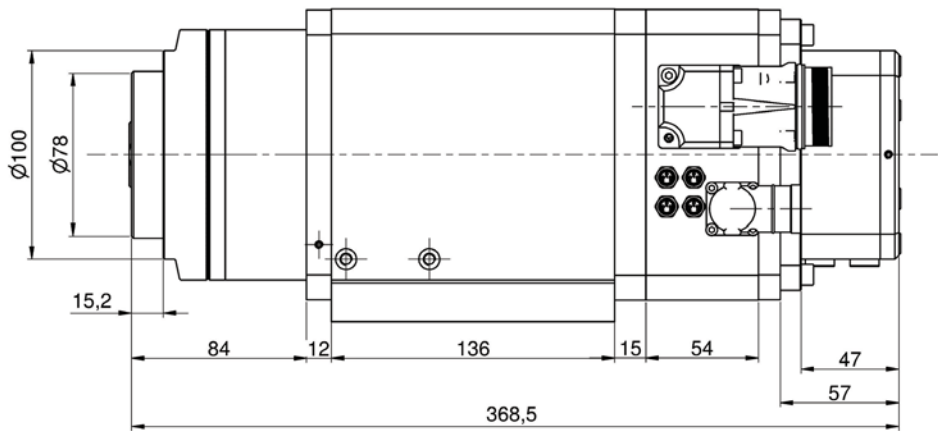


Spindle attributes:

Processing type:	Grinding
Tool interface:	HSK-A63
Weight:	approx. 35 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Hydraulic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

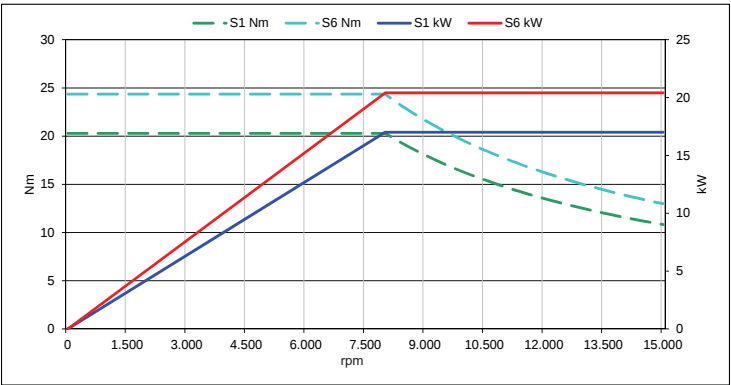
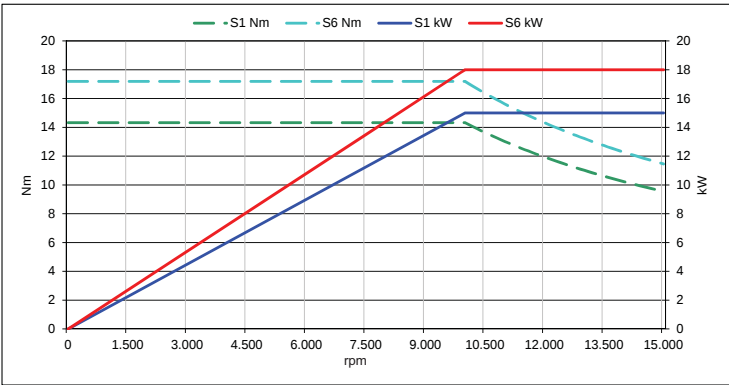
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	synchronous	synchronous
Max. rotational speed:	15,000 rpm	15,000 rpm
Nominal rotational speed:	10,000 rpm	8,000 rpm
Max. output S1:	15 kW	17 kW
Max. torque S1:	14.33 Nm	20.29 Nm
Max. voltage:	412 V	434 V
Max. current:	40 A	37 A
Max. frequency:	500 Hz	750 Hz



1.5.3 RF-HSK-A63 140/140x418

Item no. 2600.140.014

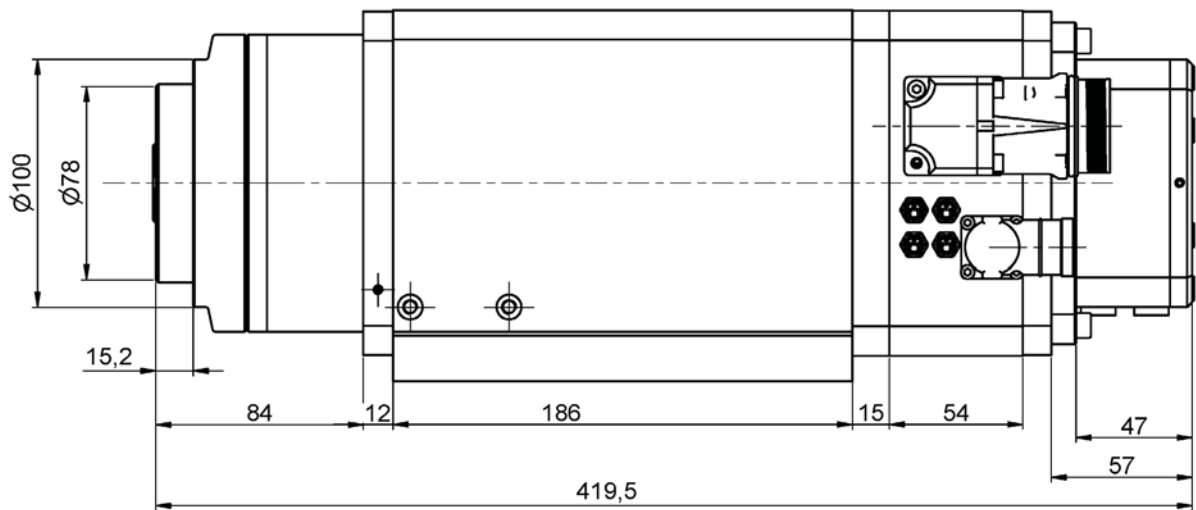


Spindle attributes:

Processing type:	Grinding
Tool interface:	HSK-A63
Weight:	approx. 35 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Hydraulic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC/KTY
Cooling:	Water

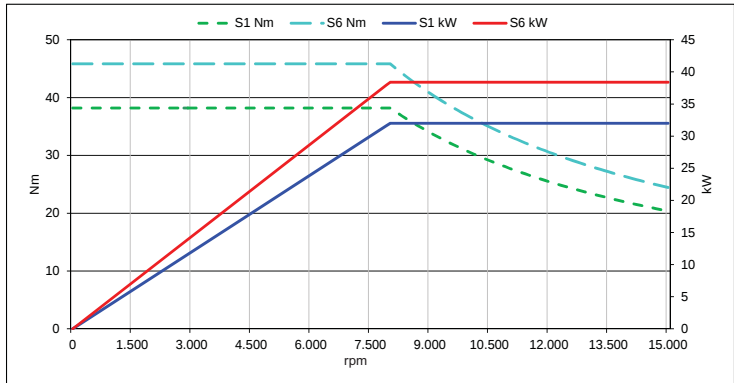
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	synchronous
Max. rotational speed:	15,000 rpm
Nominal rotational speed:	8,000 rpm
Max. output S1:	32 kW
Max. torque S1:	38.2 Nm
Max. voltage:	421 V
Max. current:	83 A
Max. frequency:	750 Hz



1.5.4 RF-HSK-E63 175/175x472

Item no. 2600.175.003

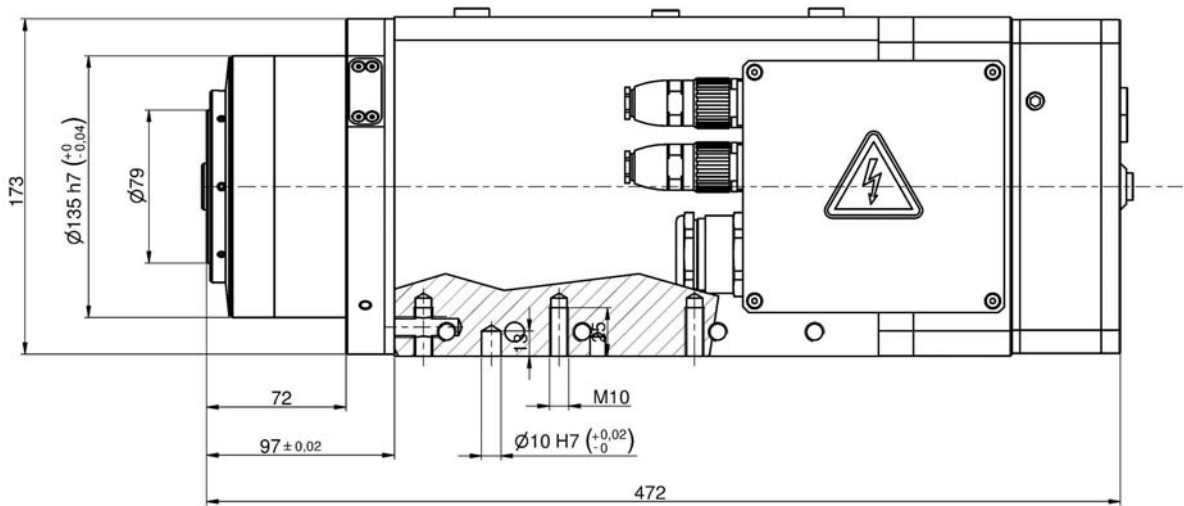


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E63
Weight:	74 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

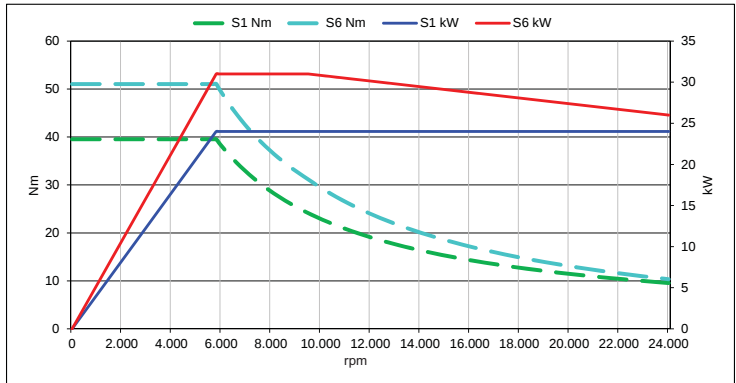
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	asynchronous
Max. rotational speed:	24,000 rpm
Nominal rotational speed:	5,850 rpm
Max. output S1:	24 kW
Max. torque S1:	39.11 Nm
Max. voltage:	380 V
Max. current:	82 A
Max. frequency:	800 Hz



1.5.5 RF-HSK-B80 175/175x510

Item no. 2600.175.008

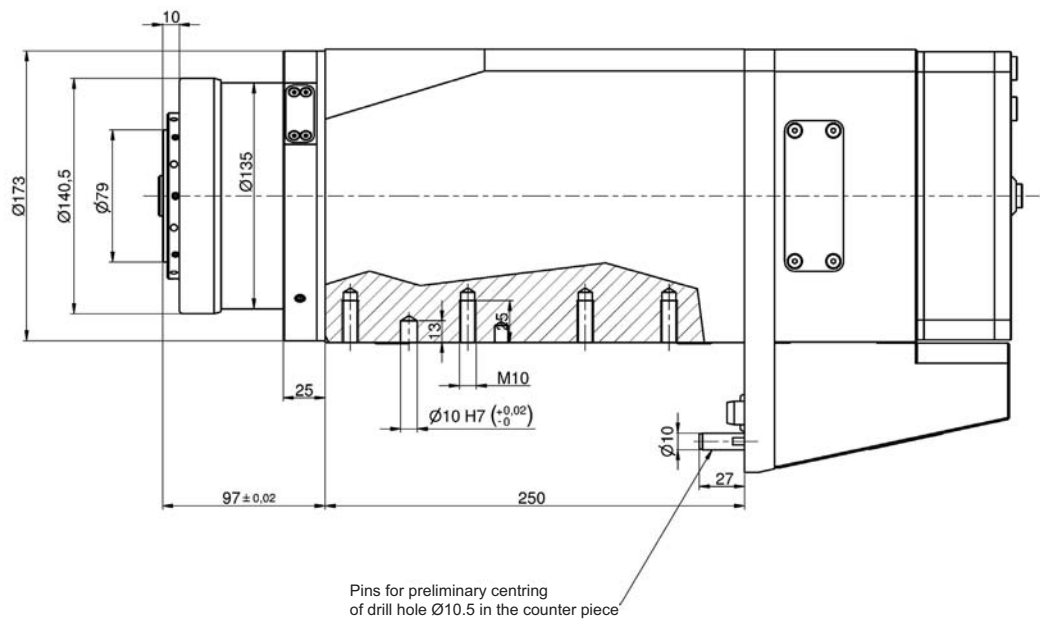


Spindle attributes:

Processing type:	Milling, drilling, grinding
Tool interface:	HSK-E63/-B80
Weight:	74 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

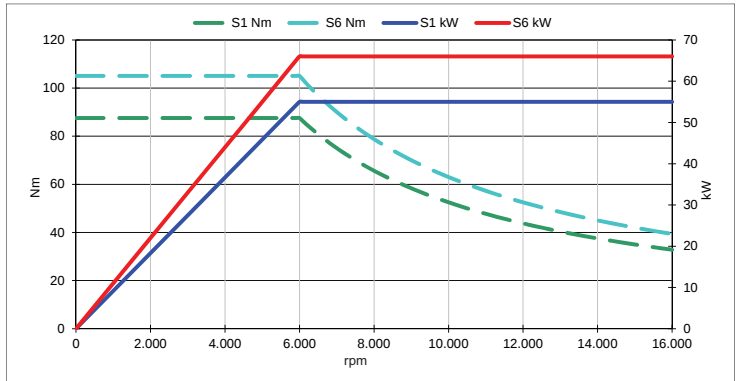
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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Motor data:

Motor type:	synchronous
Max. rotational speed:	16,000 rpm
Nominal rotational speed:	6,000 rpm
Max. output S1:	55 kW
Max. torque S1:	87.54 Nm
Max. voltage:	534 V
Max. current:	120 A
Max. frequency:	800 Hz



1.5.6 RF-HSK-F80 175/175x472

Item no. 2600.175.030

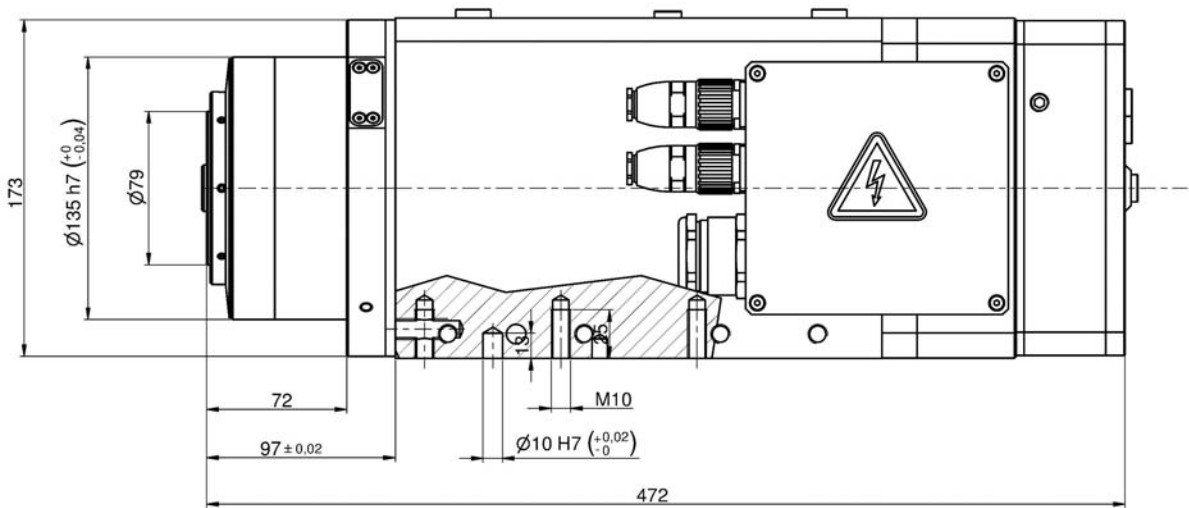


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E63/-F80
Weight:	74 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

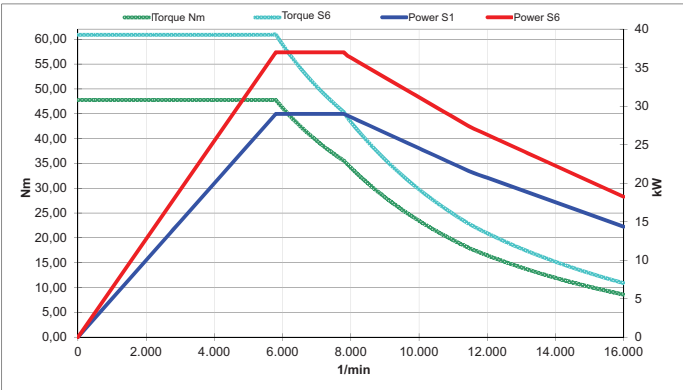
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
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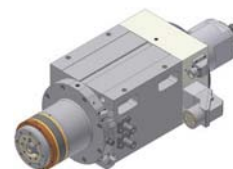


Motor data:

Motor type:	asynchronous
Max. rotational speed:	16,000 rpm
Nominal rotational speed:	5,900 rpm
Max. output S1:	29 kW
Max. torque S1:	47 Nm
Max. voltage:	400 V
Max. current:	64 A
Max. frequency:	800 Hz

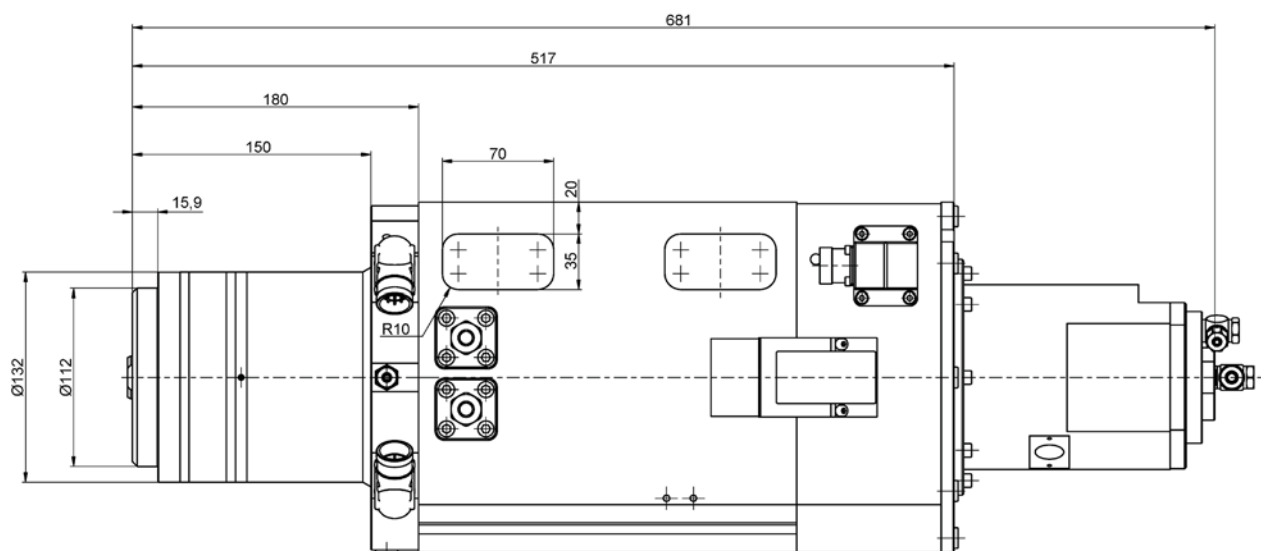


Item no. 2600.220.001

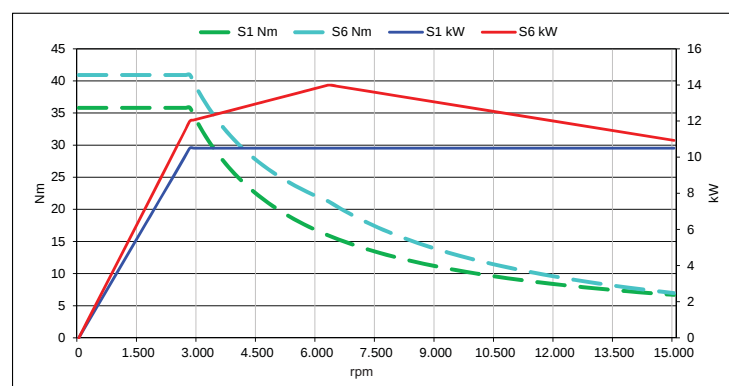


Processing type:	Milling, drilling
Tool interface:	HSK-A63
Weight:	about 125 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Hydraulic
Sensor technology:	Release unit monitoring
Thermal sensor:	PTC, KTY and NTC
Cooling:	Water

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature and/or bearing state monitoring
Rotary feed-through:	80 bar (cooling lubricant) 5 bar (air up to max. 10,000 rpm)



Motor type:	asynchronous
Max. rotational speed:	15,000 rpm
Nominal rotational speed:	2,840 rpm
Max. output S1:	10.5 kW
Max. torque S1:	35.81 Nm
Max. voltage:	380 V
Max. current:	46 A
Max. frequency:	500 Hz



1.6 HSK80 / HSK100 / Capto C8

1.6.1 RF-HSK-E80 175/175x578

Item no. 2600.175.026

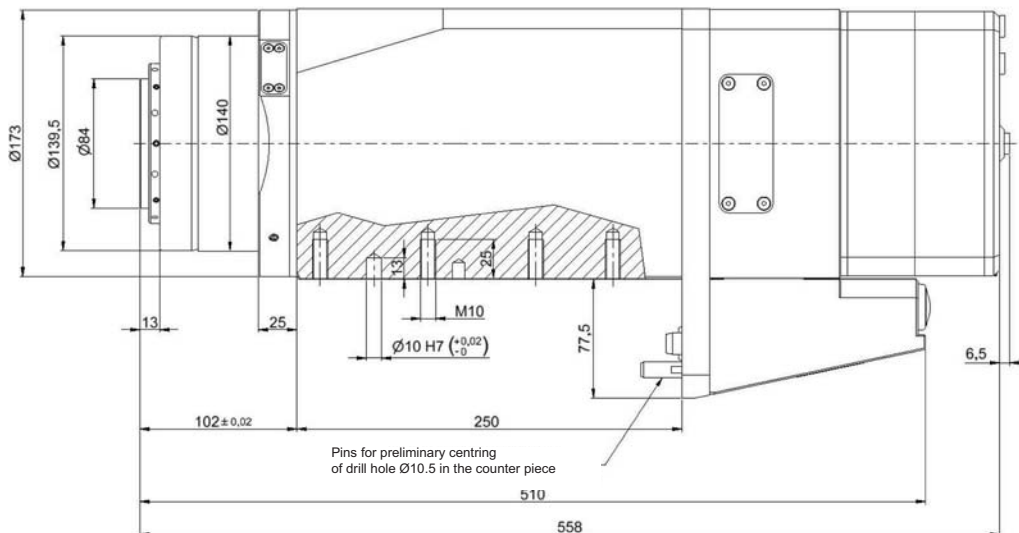


Spindle attributes:

Processing type:	Milling, drilling
Tool interface:	HSK-E80
Weight:	76 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Pneumatic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

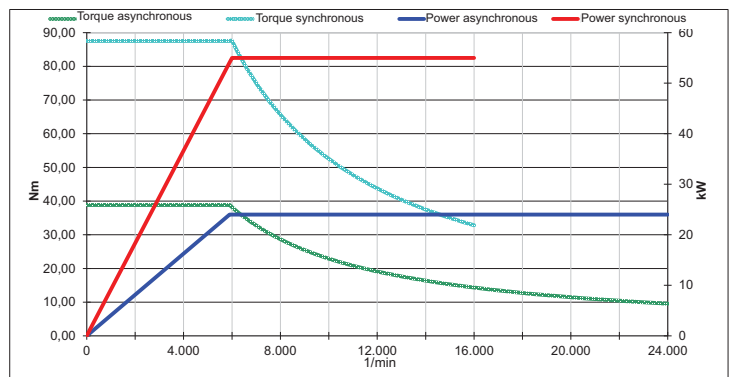
Optional additional functions:

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Bearing temperature and/or bearing state monitoring
Rotary feed-through:	80 bar (cooling lubricant) 5 bar (air up to max. 10,000 rpm)



Motor data:

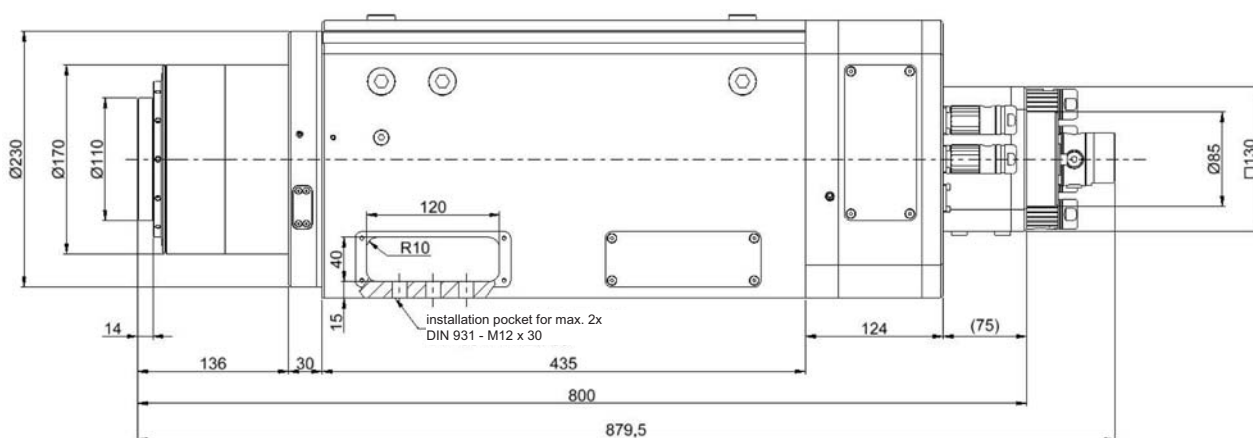
Motor type:	synchronous	asynchronous
Max. rotational speed:	13,000 rpm	18,000 rpm
Nominal rotational speed:	6,000 rpm	6,000 rpm
Max. output S1:	55 kW	24 kW
Max. torque S1:	87.54 Nm	39.11 Nm
Max. voltage:	480 V	380 V
Max. current:	120 A	82 A
Max. frequency:	650 Hz	600 Hz



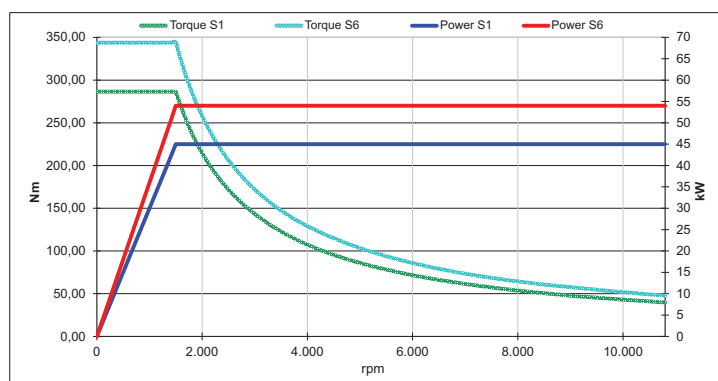
Art.-Nr. 2620.250.001

Processing type:	Milling, drilling
Tool interface:	Capto C8, HSK-100
Weight:	240 kg
Ball bearing protection:	Sealing air 0.4 bar
Bearing lubrication:	Grease lubrication
Release unit:	Hydraulic
Sensor technology:	Release unit monitoring
Thermal sensor:	KTY
Cooling:	Water

Encoder:	TTL or sin/cos 1 vss
Sensor technology:	Monitoring Bearing temperature
Rotary feed-through:	140 bar (cooling lubricant) 10 bar (air)



Motor type:	asynchronous
Max. rotational speed:	10.800 rpm
Nominal rotational speed:	3.000 rpm
Max. output S1:	45 kW
Max. torque S1:	285 Nm
Max. voltage:	400 V
Max. current:	185 A
Max. frequency:	720 Hz



2. Belt spindles

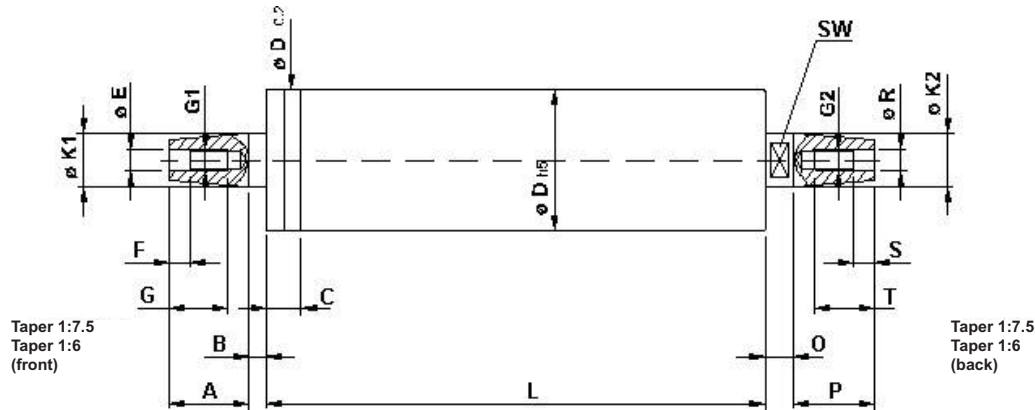
Our belt spindles are used for interior, exterior and flat grinding.

The bearing can be adapted to your needs.

You can choose between models with interior, exterior or manual HSK taper .

Belt spindles RSA/RSA-V/RSA-VV

Belt spindles with exterior taper for exterior, interior and flat grinding



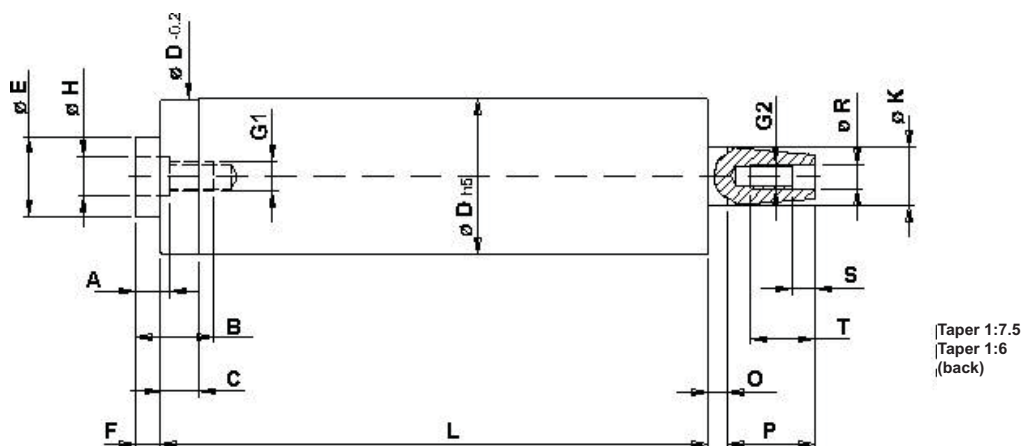
Design sizes from our series line:

Type D x L	Rotational speed x 1000 RSA/ RSA- V grease	K1	A	B	C	E	G1	F	G	O	K2	P	R	G2	S	T	SW
RSA - 60 x 250	28 / 24	18	25	3	11	8	M8	11	25	9	18	25	8	M8	11	25	14
RSA - 80 x 315	20 / 17	27	35	4	12	12	M12	13	34	12	27	35	12	M12	13	34	24
RSA - 100 x 315	- / 12	38	52	4	14	16	M16	15	42	15	38	52	16	M16	15	42	32

(other sizes available upon request)

Belt spindles RSP

Belt spindles with flat abutment for interior grinding



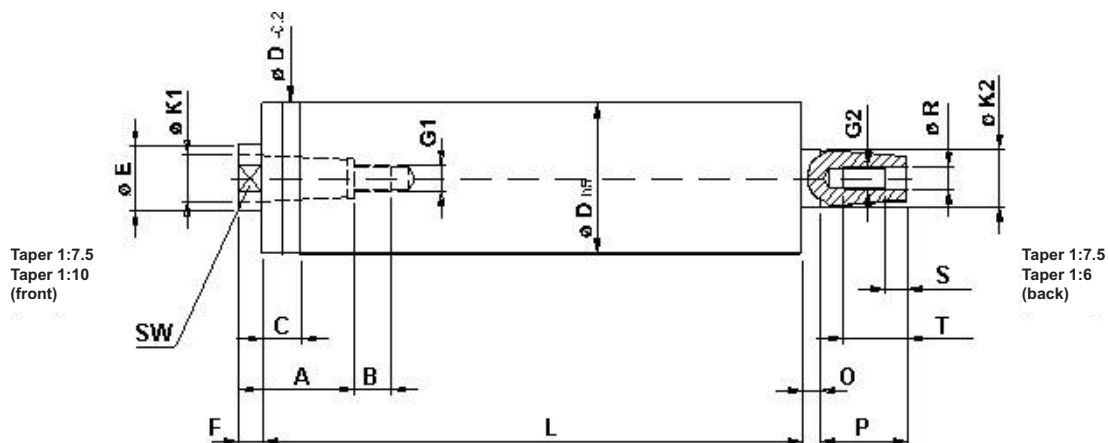
Design sizes from our series line:

Type D x L	Rotational speed	H	A	B	G1	C	E	F	O	K	P	R	G2	S	T
RSP - 50 x 250	55.000	10	8	16	M8	10	30	6	6	10	15	5	M5	7	14
RSP - 60 x 160	45.000	14	8	18	M10	12	40	8,5	7	19	20	6	M6	8	18

(other sizes available upon request)

Belt spindles RSI/RSI-V

Belt spindles with interior taper for interior and flat grinding



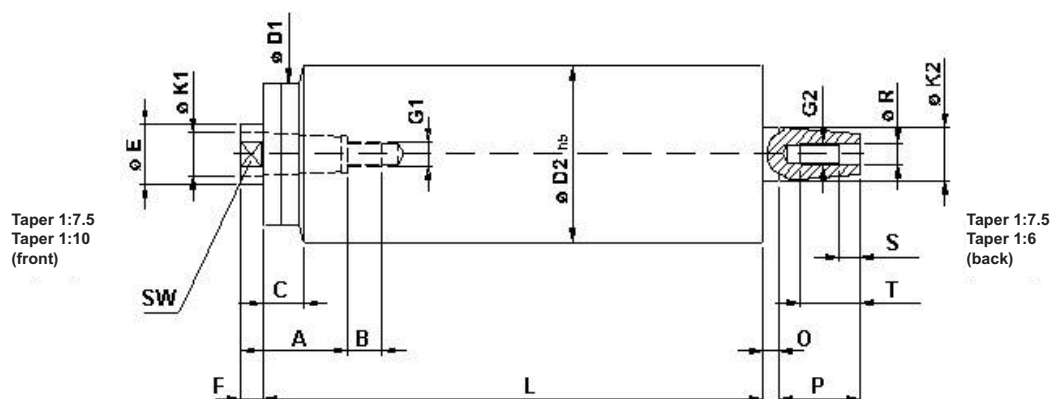
Design sizes from our series line:

Type D x L	Rotational speed x 1000 RSI / RSI - V grease	K1	A	B	G1	C	E	F	SW	O	K2	P	R	G2	S	T
RSI - 45 x 250	40 / 35	10	28	14	M6	10	15	8	12	6	13	20	6	M6	7	20
RSI - 60 x 250	28 / 24	14	39	19	M8	11	20	9	17	7	18	27	8	M8	9	24
RSI - 60 x 315	28 / 24	14	39	19	M8	11	20	9	17	7	18	27	8	M8	9	24
RSI - 80 x 315	20 / 17	22	60	24	M14	12	30	13	27	8	28	42	12	M12	13	32
RSI - 100 x 250	- / 12	32	76	24	M18	14	44	16	41	12	38	57	16	M16	15	42

(other sizes available upon request)

Belt spindles RSI-A/ RSI-VA

Belt spindles with interior taper for interior and flat grinding with shouldered spindle bushing



Design sizes from our series line:

Type D1.D2 x L	Rotational speed x 1000 RSI - A/ RSI - VA grease	K1	A	B	G1	C	E	F	SW	O	K2	P	R	G2	S	T
RSI - A 60.80 x 160	28 / 24	14	39	19	M8	23	23	9	20	7	18	27	8	M8	9	24
RSI - A 60.100 x 250	28 / 24	14	39	19	M8	23	23	9	17	7	18	27	8	M8	9	24
RSI - A 70.100 x 250	28 / 24	18	49	21	M12	23	28	11	24	7	23	35	10	M10	11	28
RSI - A 80.100 x 250	20 / 17	22	60	24	M14	25	33	13	30	8	28	42	12	M12	13	33

(other sizes available upon request)

3. Custom spindles

Even if you only need a relatively small quantity, we are your partner for custom solutions and innovative spindles.

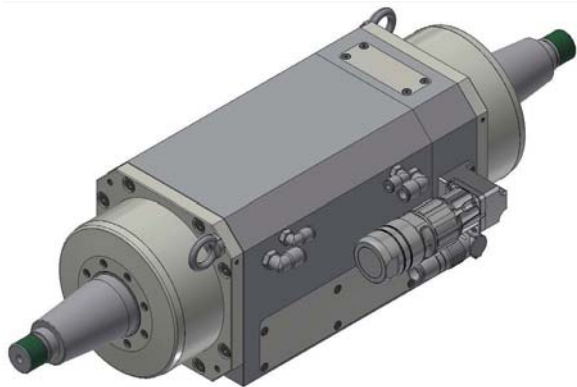
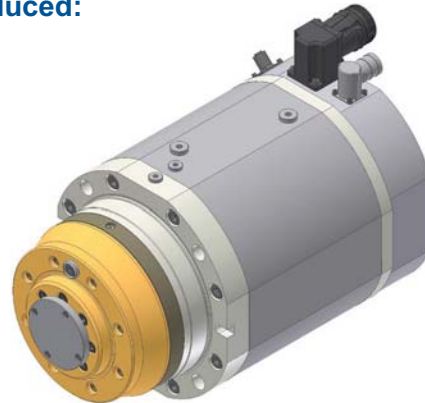
Whether you need spindles for true running tasks, for custom grinding requirements, or for test bays - we have the right spindle for your application. If not, we can very quickly produce a custom-tailored concept from our portfolio that meets your needs.

Simply advise your specific requirements, and we will send you a technical draft together with a quotation for the number of items you requested.

Examples of custom spindles that we have already produced:

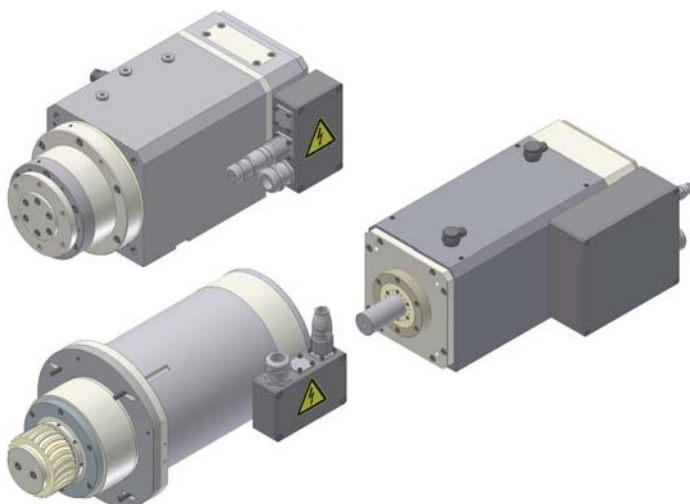
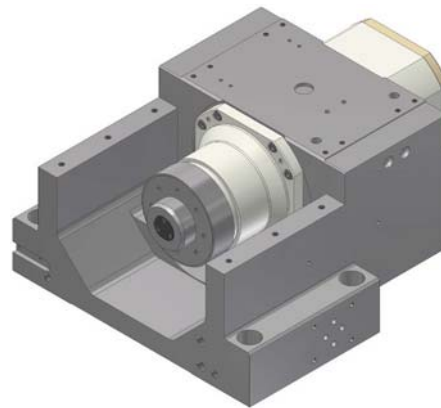
Grinding spindle with flange holder A6 for large grinding discs.

An automatic weight balancing system can be implemented in the spindles. With encoder for standstill monitoring.



Grinding spindle with 2 tapers to accommodate grinding disks up to 500 mm in diameter and 110 mm wide for exterior cylindrical grinding. The powerful torque of the motor of 47 Nm means that a great variety of grinding tasks can be successfully undertaken.

Spindles for the profiling and alignment of grinding discs. The spindles are pressurized with sealing air as a protective measure for the ball bearings. The ball bearings are grease-lubricated and are thus maintenance-free. The spindle is water-cooled for optimal thermal stability.



Examples for high-performance motors used in test bays. The shaft ends are designed according to customer specifications. Our motors are specialized to meet requirements for high rotational speed while providing high performance.

4. 5-axis heads

Our standard programme includes 2 compact milling head designs for 5-axis processing of aluminium, plastic, wood, CFRP/GFRP, Zamak and Ureol, which can be combined with our spindle models.

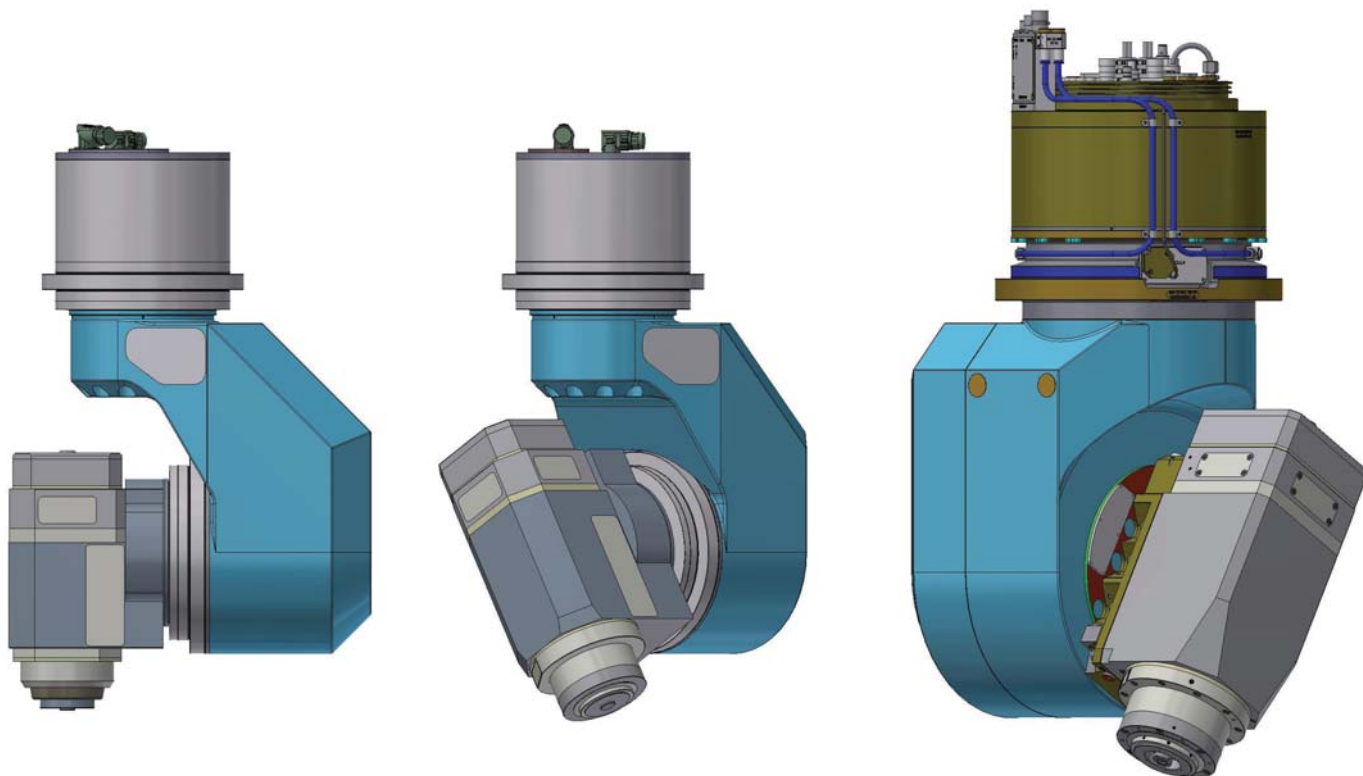
The heads have a modular design and ensure high precision and thermal stability due to the water-cooled drive elements.

The axis drives consisting of the torque motors achieve the highest dynamics in the production process.

With our milling heads you get a highly innovative quality product that turns your milling machine into a high-end 5-axis machine for perfect simultaneous processing.



Milling head type	TAE	AC16
C-axis Slewing range	+/- 360°	+/- 360°
A-axis Slewing range	+/- 110°	+/- 110°
Clamping torque:	600 Nm	760 Nm
Holding torque:	105 Nm	240 Nm
Rotational speed:	360°/s	360°/s
Measuring system:	1 Vss incremental	1 Vss incremental



Spindle model	2600.150.026	2600.150.031	2600.175.025
Milling head type	TAE	TAE	AC16
Max. speed	24,000 rpm	24,000 rpm	24,000 rpm
Nominal speed	12,000 rpm	10,000 rpm	5,850 rpm
Motor type	asynchronous	asynchronous	asynchronous
Max. power (S1)	10 kW	15 kW	24 kW
Max. torque (S1)	8 Nm	14.52 Nm	39.11 Nm
Weight	135 kg	145 kg	380 kg
Tool interface	HSK-F63	HSK-F63	HSK-A63
Sensor technology	3 PNP sensors for tool change monitoring		
Release unit	Pneumatic cylinder		
Rotary encoder	1 Vss with 256 intervals / rotation		
Ball bearings	Permanently greased		



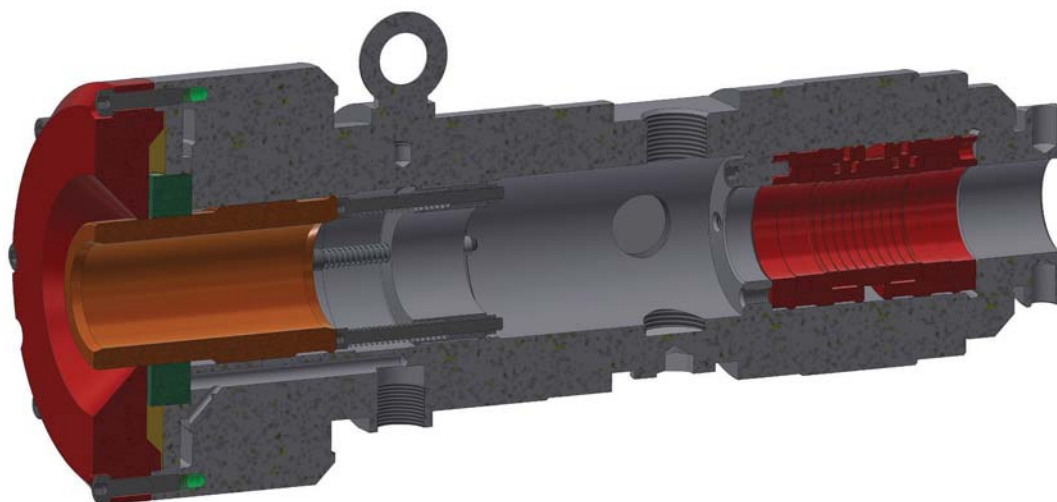
5. Drilling oil feed apparatus (BOZA)

The drilling oil feed apparatus (BOZA) can be optionally moved and positioned depending on the drilling process, and is used with the BTA process. The BTA drilling process is a deep hole drilling process for special deep hole drilling machines and transfer lines with external cooling lubricant feed and internal chip removal. This type of BOZA and sealing on the work piece is required for the cooling lubricant feed. The flexible contact of the drill bush on the work piece means that oil leaks and disruptive hydraulic counterforces are minimized. Another task of the BOZA is guiding the drilling tube and pressing the deep drilling oil at high pressure along the drill to the drill bit.

Deep drilling machines for processing very large workpieces requires accessories of sufficient size. Here in particular, the benefits of the BOZA head bearing developed by us in-house once again become apparent.

Whereas with standard bearings a significant amount of assembly space for outer and inner rings is lost, with us the rolling elements run directly on the element surfaces. This means that our BOZAs have an exceptionally compact design. This is advantageous in terms of the required centre height, top overhang (loss length) and low-play concentricity. The option to mount heavy additional devices such as jaw chucks or flanges directly onto the rotating outer ring provides a significant improvement in terms of the statics.

Standard chucks can be used without special modification as the required coolant sealing elements between the rigid and rotating areas are already fitted within the BOZA (directly on the chuck flange).



Design sizes from our series line (other design sizes available on request):

Art. no.:	Drilling range:	Rotational speed:	Internal pressure:	Clamping force:
7021.050.001	12.5 to 50 mm	max. 1000 rpm	60 bar	max. 10 kN
7021.100.001	25 to 100 mm	max. 500 rpm	40 bar	max. 16 kN
7021.200.001	50 to 200 mm	max. 250 rpm	25 bar	max. 32 kN
7021.250.001	50 to 250 mm	max. 200 rpm	25 bar	max. 32 kN
7021.400.001	100 to 400 mm	max. 150 rpm	16 bar	max. 50 kN
7021.500.001	100 to 500 mm	max. 125 rpm	16 bar	max. 60 kN

Available accessories:

- Drill bush
- Drill bush holder
- Pressure plates
- Boring tube seal
- Clamping tapers

In all our drilling areas, solutions are available for front sealing, high precision taper clamp or heavy-load design for jaw chuck operation, with either stationary or counter-rotating workpieces.

With models in the 12.5 to 100 mm drilling range, all components are hardened and ground. This is the case with all functional surfaces in the larger models. Head, main body and drill seal are separate, meaning they can be replaced or mounted rotated against one another, depending on the required connection position.

6. Repair service

Our repair service meets the highest quality requirements and ensures that your product equates to the specifications of a new spindle after the repair. You can trust our technological expertise.

Reckerth repair service from evaluation to delivery:

Analysis: The spindle requiring repair is delivered, dismantled and examined. A detailed repair and action report summarizes the results together with a cost estimate.

Analysis technology: All individual rotation-symmetrical components are checked and calibrated utilizing state-of-the-art measuring technology.

Repair: Upon approval of the costs, the problem is addressed and solved immediately, even for spindles from other manufacturers. Thanks to our in-house grinding and turning shop, the repair time is reduced to a minimum.

Final assembly: As a result of the spatial separation of damage analysis and final assembly in the clean room, we guarantee highest quality standards during the handover.

Quality control: The fine-tuning of the balancing and test runs with protocols for the customer are carried out in this phase. In a separate break-in room, we run every spindle up to the final speed prior to the delivery to the customer.

Warranty: The quality of a repaired spindle corresponds with that of a new spindle. A repaired spindle carries a warranty of 6 months.



True-running gauging machine (to test rotation-symmetric parts of a spindle)



Fine tuning of balancing quality on the spindle



Comparison:

Spindle condition before and after repair.

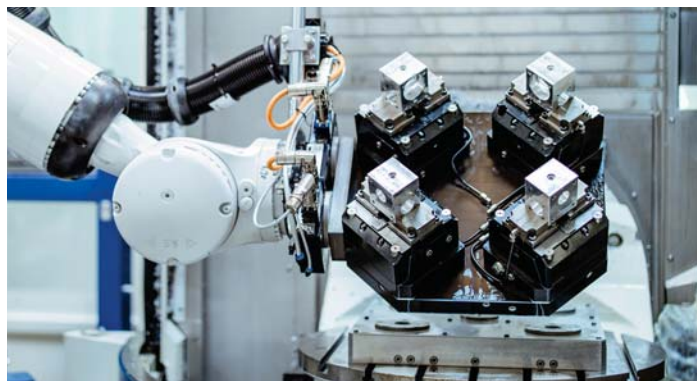
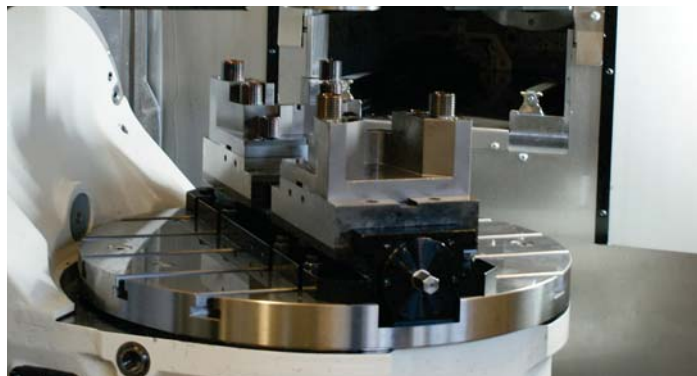
7. BEST GmbH - axial clamping technology

BEST the manufacture of clamping systems and clamping equipment with headquarters in Filderstadt-Bonlanden and is managed under one roof with Hugo Reckerth GmbH. The product range of BEST comprises a large selection of centric closing, stationary two-jaw chuck equipment, which stands out from its competition thanks to particularly high manufacturing precision.

In addition, BEST offers customer-specific solutions that align complex workpieces with highest precision in power-operated clamping equipment. As a medium-sized company, we are able to rapidly respond to your individual requests.

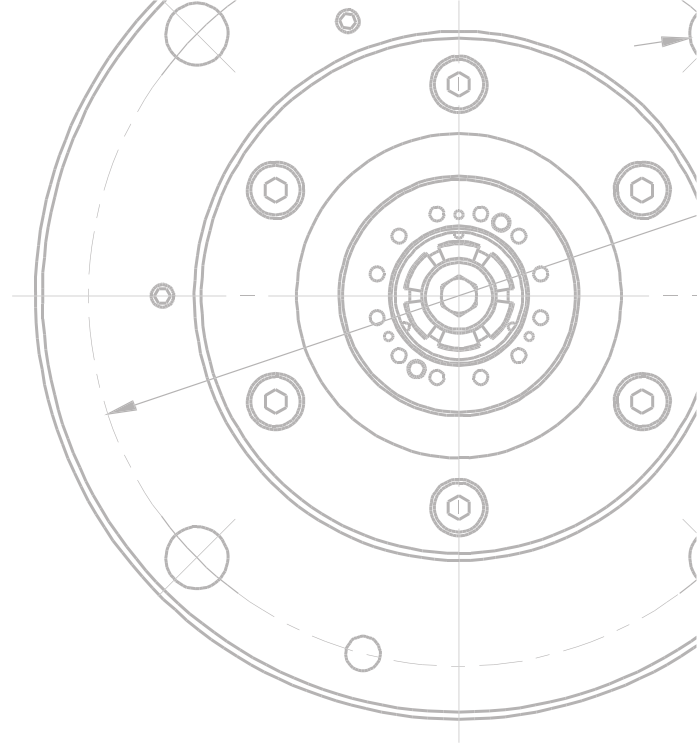
Range of services:

- Mechanical centric vices
- Pneumatic centric vices
- Hydraulic centric vices
- Face plates
- Manual chucks
- Customized clamping solutions



If you have any questions regarding our products or require personal assistance, we would be delighted to hear from you and will be glad to advise you.

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SPINDLE MASTERS

SPIN YOUR SUCCESS





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