

Bring Out the Best in Motion



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PrimoPal Motor Co., Ltd. is a joint-venture manufacturing, engineering and trading company, located at the free-trade zone of Shanghai, China. PrimoPal specializes in development, production and selling of various high-quality and cost-effective precision motor and motion control products, including Hybrid stepper motors, PM stepper motors, Linear actuators, Close-loop stepper motors, Brushless DC motors, Brushless servo motors, AC servo motors, PM DC motors, AC induction motors, Synchronous motors, Gear motors, Stepper drives, Brushless DC drives, Hybrid servo drives, AC servo drives, Brushless servo drives, Brushless servo drives, Encoders, Spur gearboxes, Planetary gearheads, Brakes, Power supplies, Accessories, and so on.

Since establishment, PrimoPal is committed to providing outstanding quality, economical solutions, impeccable support and after-sales service for every client. Our manufacturing bases are equipped with advanced quality testing devices, precise injection molding machines, auto high-speed punches, auto winding machines and other advanced manufacturing equipment. It makes us have the ability of continuously providing products with superior quality. Besides, we have an engineering team with many years of experience in motor design and application engineering. This ability of offering custom products often gives our customers the great benefit.

For PrimoPal, the customer is not only a buyer, but also a long-term business partner. We work not only to meet their expectations, but also to exceed them through continuous cycles of learning. We believe it is the key to a successful business relationship that understanding our customer's goals, delivering what our customers need and when they need it. To demonstrate our commitment to all our customers, PrimoPal has adopted "Bringing out the Best in Motion" as our official slogan, which means our ultimate goal is to become one of the world's top level companies in the industry of precision motor and motion control system. The pursuit of excellence encourages all PrimoPal employees to forge ahead into improving our business processes and increasing our management efficiency. We have no doubt that our endeavors enable us to maintain strong presence in the competitive market.

Now, let us help you find the right solution for your motor and motion control systems.









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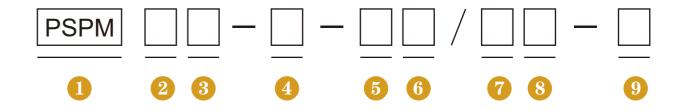
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PRODUCT NUMBER CODE



- PrimoPal's High-speed Electric Spindle Motor
- 2 Type C: Ultrasonic/Lathe
 - F: Forced Air-cooling, woodworking
 - K: Engraving machine tool
 - L: CNC machine tool processing
 - M: Grinding machine
 - P: Belt shaft
 - Z: Woodworking/Engraving machine tools
 - R: Self-cooling
- 3 Clamping diameter or square center height (2-3 digits, unit: mm)
- 4 Tool holder:

Automatic Type: BTXX, ISOXX, HSKXXX, etc.

Manual Type: omitted

5 - Speed (Unit: Kr/min)

Ordinary: 2-digits

Constant power speed range: 5 characters (XX-XX)

- 6 lubrication mode:
 - Z: grease lubrication
 - W: oil mist lubrication
 - Q: oil and gas lubrication
- Rated power (unit: KW): 2 effective digits
- 8 Feature identification & Serial number:

Feature identification: S---double head, R--clockwise, F—flange mounting,

I--long shaft, others—omitted

Serial number: one digit - A, B, C, ..., No modifications - omitted

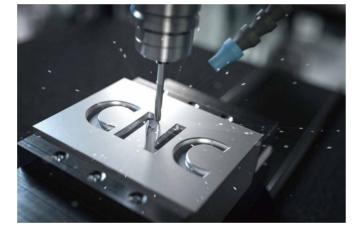
9 - Number of poles: 1 digit. If 2 poles, omitted

What is a Spindle Motor

The spindle motor is an important component of many modern machine tools and industrial robots. Since the motor drives the spindle directly with this spindle drive and there is no gear or V-belt for transmission, the motor spindle is also referred to as a direct drive. A spindle motor consists of various components. The basic structure is the same from manufacturer to manufacturer. The main components of the motor spindle are: housing, spindle and motor. Further elements include: spindle bearings, tool interface, cooling and sensors for monitoring the function and supporting the control.

How Do Spindles Work

Machining spindles are often powered by electricity, but they can also be powered by compressed air. They're available in a wide range of sizes to meet many different needs. A spindle is devised of a motor, a taper for holding tools, and a shaft that holds together all the separate components. Spindles rotate on an axis, which receives input on movement from the accompanying CNC controller.



Types of High-Speed Spindles

In machine shops, high-speed spindles are often preferred, as these configurations work best when dealing with metal and other materials. There are two types of high-speed spindles, each of which offers its own distinct set of benefits. An integral motor spindle features an internal motor, with a maximum speed range of 60,000 RPMs. Such a high maximum speed makes it great for a number of machining applications but can also limit its lifespan. Additionally, power and torque are limited due to the constricting design of motor housing.

Belt-driven spindles are another high-speed option. While max speed, which is 15,000 RPMs, is far less than integral motor spindles, this design can achieve greater levels of power and torque thanks to the external motor. This spindle type is also less costly, which makes it an ideal option for machine shops with limited budgets. However, the low max speed can restrict how the spindle is used.

Applications of Spindles

Spindles have a multitude of uses across many different industries. This includes equipment integral to agriculture, automotive applications, mold manufacturing, and even aerospace applications. In terms of the machining process, spindles play an important role in a fast production space.

For instance, metal lathes are used to cut hard materials. Along with metals, these machines can also cut plastics, as well as sturdy composite materials. Lathes can be used for milling, which uses rotary cutters to trim away at a piece until it reaches the desired shape. Machines containing spindles can also be used in woodworking, electrical component creation, and manufacturing parts for computers.

How to choose a CNC spindle

The right choice of a spindle or a milling head is very important. As long as that goes for fun in plywood or soft plastics, a"toy" brush spindle in a plastic housing may be enough. But for the professional use (i.e. to make money) it is totally unsuitable. With hard work it can be finished in a few hours and at economical work it may be sufficient up to six months.

Professional spindles are brushless inductive inverter-controlled spindles on ceramic bearings with a tight engine compartment and absolutely with a metal housing. We have a choice of spindle revolutions and power.

The spindle speed is the nominal value of the identification plate (12.000, 15.000, 18.000, 24.000, 40.000 rpm), which does not mean that the spindle is always spinning with these revolutions. Revolutions can be controlled by the inverter but you have to remember that the spindle power is the value of torque multiplied by rotational speed, so while preserving torque and reducing revolutions by half - about half the power also falls. And here we have to make a compromise ...

There is not a spindle for everything. The higher spindle power the larger are the diameters of bearings and these bearings are the cause of the spindle speed limitation. The larger bearing diameter the higher is the centrifugal force with which the balls are pressing on the running tracks of the outer ring of the bearing, and thus more heat is released (one of the methods to reduce this effect is the use of much lighter ceramic balls). Therefore, 40.000 rpm spindles are usually produced only in low power ranges.

High speed is best for materials such as aluminum, wood, composite materials, laminates, etc. When machining steel, especially stainless steel, thermoplastics or when drilling with HSS drill bits, high speed is rather not applied.

As for the power, the primary criterion is the maximum diameter of milling cutters which will be used and the materials processed with these cutters. For machining aluminum, plastic, wood or laminate with cutters up to 5mm the spindle (0.8kW 24,000 rpm) is sufficient, and accordingly cutters up to 8mm - 1kW spindle, cutters up to 12mm - 3.3kW spindle, cutters up to 16mm - 5.6kW spindle. For steel, we should primarily choose a lower rpm spindle (15,000 to 18,000 rpm) and accordingly cutters up to 10mm - 3.3kW spindle, cutters up to 12mm - 5.6kW spindle, cutters up to 16mm - 7kW spindle, cutters up to 20mm - 10kW spindle.

If you are planning to drill in steel, you always have to choose a more powerful spindle because, e.g., if you want to drill in steel with a 6mm drill at 2000rpm with the 5.6kW 18,000 rpm spindle, we have only 0.6kW at our disposal. You cannot compare the powers of spindles with the powers of conventional milling machines because they have gears and there is no need to have such a torque reserve. And one more thing. The sustainability of such spindles is up to 10 years.

Tips before using:for all spindles

- 1. The electric spindle and the frequency inverter shall be suitable with each other. The specifications and parameter settings of the inverter shall match the nominal parameters of the spindle, and it will burn the spindle if the settings are not correct.
- 2. Before using water-cooling spindle, it shall ensure that cooling cycle system works normally and the running under no cooling conditions is prohibited. The volume of cooling water is calculated as per 1 liter/hw, minute, the minimum flow of cooling water in not less than 5 liter/minute, cooling water pipe and the nozzle shall be connected reliably and there is no leakage.

- 3. The cooling liquid shall be clean and free of grease and the temprature shall be within 5-30 $^{\circ}$ C. The cooling medium shall carry out force cooling when the ambient temperature is higher than 30 $^{\circ}$ C. The precision lathe requires the cooling liquid with a corstant temperature of 20±2 $^{\circ}$ C.
- 4. During storage and transport of the spindle, the status of high-speed grease inside the bearing will change, The user shall run it at a low speed first by staeting from the lowest speed of the spindle for 30 minutes and then 20 minutes for every 3000 rounds, otherwise there will have abnormal sound, noise, heat and other phenomena, which will affect the bearing life if the spindle is started directly at a high speed. During long term storage, the spindle shall run (at low speed) for 15-30minutes once a week at least.
- 5. Collet, nut and inner taper hole shall be washed clean when installing blades on the spindle in order to avois any impact on the precision. The blade handle shall be inserted into the collet more than 15mm.
- 6. For daily machining, the spindle shall be warmed up, run for 15-20 minutes when the machining speed is reached and then performs precise machining, it is better to stop the spindle for two hours every day to recover its mechanical fatigue and prolong its life time.
- 7. No knocking the end cover of the spindle, No hammering the collet and blade head when removing blades.

No shocking or colliding during transport, storage and using, eapecially the end of the spindle.

- 8. The spindle shall run in designated direction.
- 9. The spindle shall be installed and fixed according to the relevant drawings and instructions.
- 10. The temperature shall be within 22-25°C if water cooling machine is used.
- 11. The spindle adopts vapor lock and the gas source shall not be used until it has passed oil-water separator and dry filter. The air pressure is 0.2-0.25MPa and the filtering precision is 5um, otherwise there will cause damages to the bearing.

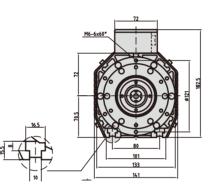
Bring Out the Best in Motion AIR-COOLED AUTOMATIC TOOL CHANGE SPINDLE • Air Cooled Broach spindle • Water Cooled Broach spindle

· Water - Cooled Broach Spindle - With Flange

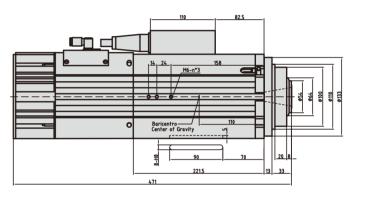
Air Cooled Broach spindle

PSPML70-24Z9.0 Short shaft



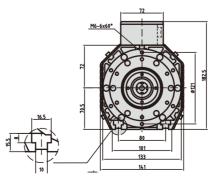


Speed	12000-24000RPM
Rated power	9KW
Number of poles	2
Voltage	380/220V
Current	18.2/31.6A
Frequency	200-400HZ
Shaft end connection	ISO30 taper hole
Cooling	Fan
Lubrication	Grease
Bearing model	2*7008C/P4, 2*7006X/P4
weight	26Kg

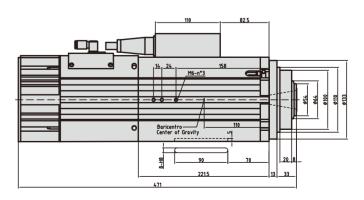


PSPML70-24Z9.0 Short shaf





Speed	12000-24000RPM
Rated power	9KW
Number of poles	4
Voltage	380/220V
Current	20/32A
Frequency	200-400HZ
Shaft end connection	ISO30 taper hole
Cooling	Fan
Lubrication	Grease
Bearing model	2*7008C/P4, 2*7006X/P4
weight	26Kg



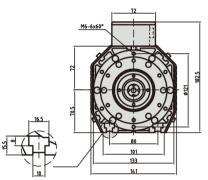
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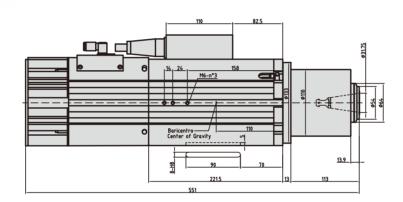
Air Cooled Broach spindle

PSPML70-24Z9.0 Long Axis



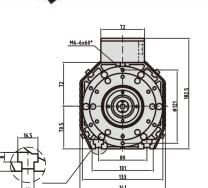
Rated power 9KW Number of poles 2 Voltage 380/220V Current 18.2/31.6A	120	24000RPM
Voltage 380/220V	9KV	
	2	
Current 19.2/21.6A	380	0V
Current 18.2/31.0A	18.7	1.6A
Frequency 200-400HZ	200	0HZ
Shaft end connection ISO30 taper hole	ISO	aper hole
Cooling Fan	Fan	
Lubrication Grease	Gre	
Bearing model 2*7008C/P4, 2*7006X/P4	2*7	3C/P4, 2*7006X/P4
weight 31Kg	31k	



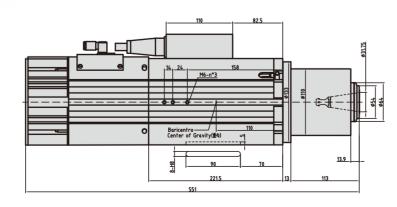


25PML/0-24Z9.0 Long Axis





Speed	12000-24000RPM
Rated power	9KW
Number of poles	4
Voltage	380/220V
Current	20/32A
Frequency	200-400HZ
Shaft end connection	ISO30 taper hole
Cooling	Fan
Lubrication	Grease
Bearing model	2*7008C/P4, 2*7006X/P4
weight	31Kg

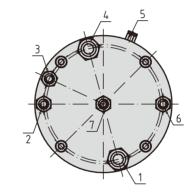


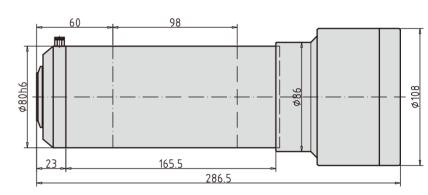
Water Cooled Broach spindle

PSPML80-20-24Z/1.5



Speed	24000RPM
Rated power	1.5KW
Torque	0.6Nm
Voltage	220V
Current	5.6A
Frequency	400HZ
Shaft end connection	ISO20 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*7005C/P4,1*7004C/P4
weight	9Kg

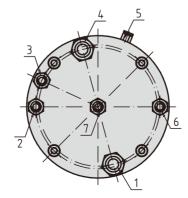


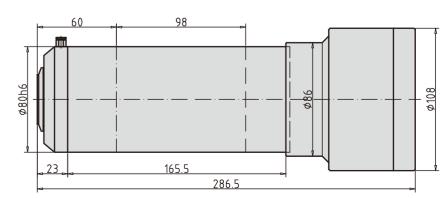


PSPML80-20-24Z/2.2



Speed	24000RPM
Rated power	2.2KW
Torque	0.72Nm
Voltage	220V
Current	6.8A
Frequency	800HZ
Shaft end connection	ISO30 taper hole
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*HY6005C/P4,1*SM6004C/P4
weight	8Kg



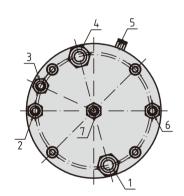


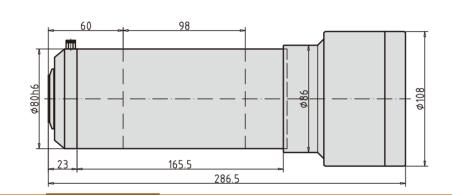
Water Cooled Broach spindle

PSPML80-20-30Z/1.5



Speed	30000RPM
Rated power	1.5KW
Torque	0.5Nm
Voltage	220V
Current	5.8A
Frequency	1000HZ
Shaft end connection	ISO20 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*HY6005C/P4, 1*SM6004C/P4
weight	8Kg

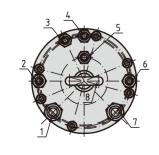


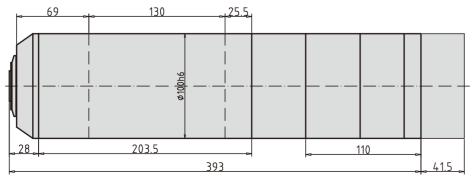


PSPMI 100-25-247/2 5



Speed	24000RPM
Rated power	2.5KW
Torque	1Nm
Voltage	220/380V
Current	9.2/5.5A
Frequency	400HZ
Shaft end connection	ISO25 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6006C/P4,1*7005C/P4
weight	18Kg



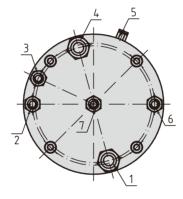


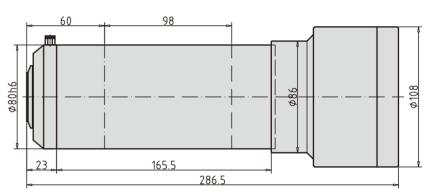
Water Cooled Broach spindle

PSPML110-30-18Z/3.2



Speed	18000RPM
Rated power	3.2KW
Torque	1.7Nm
Voltage	220/380V
Current	11.5/6.9A
Frequency	600HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*7007C/P4,1*7005C/P4
weight	23Kg

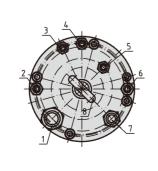


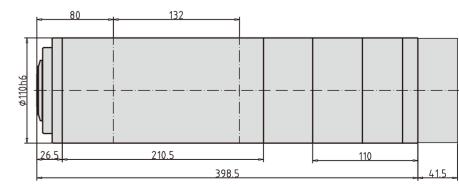


PSPML110-30-24Z/4.5



Speed	24000RPM
Rated power	4.5KW
Torque	1.79Nm
Voltage	220/380V
Current	15.5/9.2A
Frequency	800HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6007C/P4,1*7005C/P4
weight	23Kg



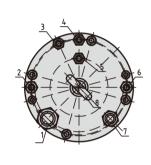


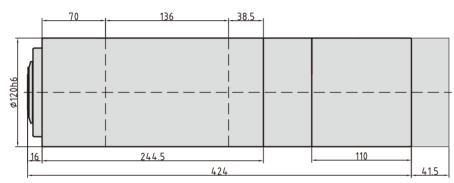
Water Cooled Broach spindle

PSPML120-30-18Z/5.5



Speed	18000RPM
Rated power	5.5KW
Torque	2.65Nm
Voltage	380V
Current	11A
Frequency	6000HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6008C/P4,2*7006C/P4
weight	25Kg



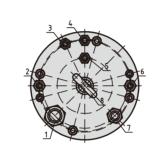


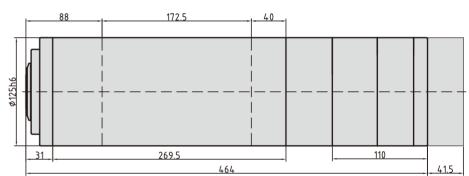
Water Cooled Broach spindle

PSPML125-30-18Z/7.5



Speed	18000RPM
Rated power	7.5KW
Torque	3.98Nm
Voltage	380V
Current	16.5A
Frequency	600HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6008C/P4,2*SM6006C/P4
weight	31Kg

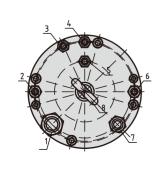


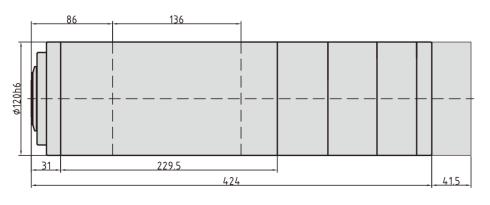


PSPMI 120-30-247/6 5



Speed	24000RPM
Rated power	6.5KW
Torque	2.6Nm
Voltage	380V
Current	13.5A
Frequency	800HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6008C/P4,2*SM6006C/P4
weight	25Kg

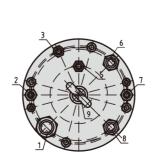


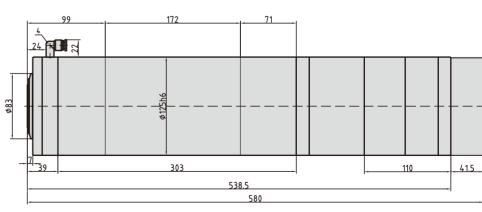


PSPMI 125-40-127/7 5



Speed	12000RPM
Rated power	7.5KW
Torque	5.98Nm
Voltage	380V
Current	16.5A
Frequency	600HZ
Shaft end connection	BT40 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6011C/P4,2*7008C/P4
weight	35Kg
·	



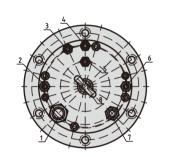


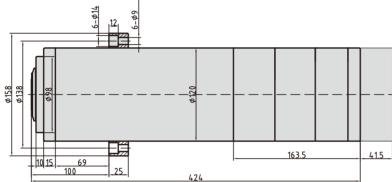
Water - Cooled Broach Spindle - With Flange

PSPML120-30-18Z/5.5



Speed	18000RPM
Rated power	5.5KW
Torque	2.65Nm
Voltage	380V
Current	11A
Frequency	600 HZ
Shaft end connection	BT30 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6008C/P4,2*7006C/P4
weight	25Kg



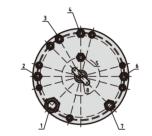


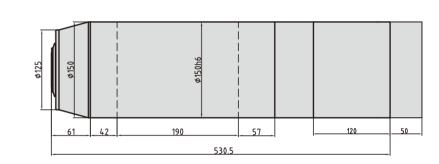
Water - Cooled Broach Spindle - With Flange

PSPML150-40-12Z12

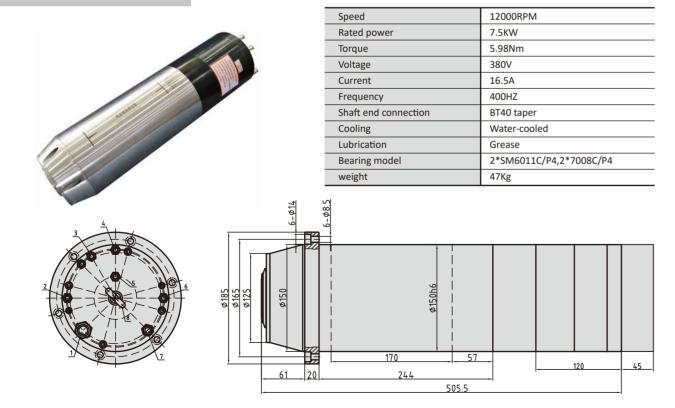


Canad	12000RPM
Speed	12000RPIVI
Rated power	12KW
Torque	9.55Nm
Voltage	380V
Current	25A
Frequency	400HZ
Shaft end connection	BT40 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6011C/P4,2*7008C/P4
weight	50Kg





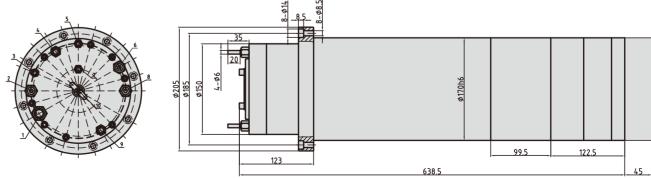
PSPMI 150-40-1277 5



PSPMI 170-40-10714



Speed	10000RPM
Rated power	14KW
Torque	13.38Nm
Voltage	380V
Current	28A
Frequency	334HZ
Shaft end connection	BT40 taper
Cooling	Water-cooled
Lubrication	Grease
Bearing model	2*SM6014C/P4,2*7010C/P4
weight	75Kg

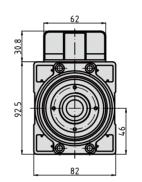


Woodworking air-cooled spindle Square air-cooled spindle Circular air-cooled spindle Air Cooled mounting spindle Air Cooled mounting spindle

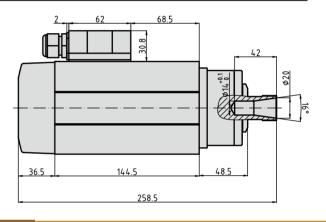
Square air-cooled spindle

SPMF46-1871 5



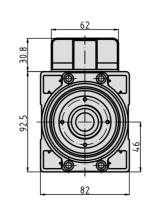


Speed	18000/24000RPM
Rated power	1.5KW
Torque	0.8/0.6Nm
Voltage	220/380V
Current	5.6/3A
Frequency	300/400 HZ
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	6Kg

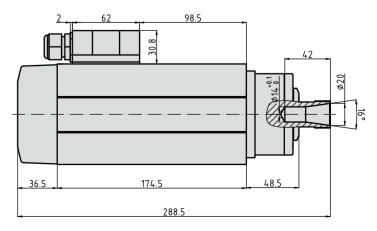


PSPMF46-18Z2.2





Speed	18000/24000RPM
Rated power	2.2KW
Torque	1.17/0.88Nm
Voltage	220/380V
Current	7.8/4.4A
Frequency	300/400HZ
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	7Kg



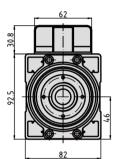
B-1

· Low noise air-cooled motorized spindle

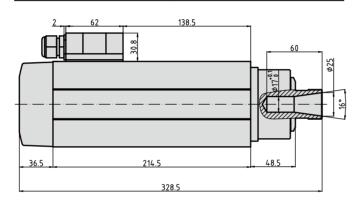
Square air-cooled spindle

PSPMF46-18Z3.5





Speed	18000/21000RPM
Rated power	3.5KW
Torque	1.59/1.36Nm
Voltage	220/380V
Current	12/7A
Frequency	300/400HZ
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7007C P4,2*7002C P4
weight	8Kg



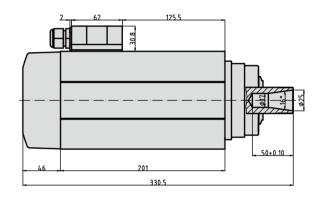
Square air-cooled spindle

PSPMF60-18Z4.5



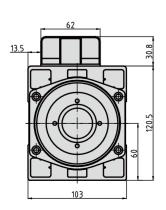
13.5	62	30.8
		120.5

Speed	18000/24000RPM
Rated power	4.5KW
Torque	2.39/1.79Nm
Voltage	220/380V
Current	15/9.0A
Frequency	300/400 HZ
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7007C P4,2*7002C P4
weight	12Kg

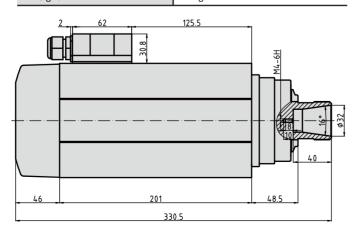


PSPMF60-1874 5



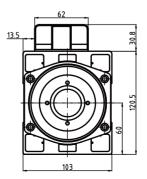


Speed	18000RPM
Rated power	4.5KW
Torque	2.39Nm
Voltage	220/380V
Current	15/9.0A
Frequency	300HZ
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7002C P4
weight	12Kg

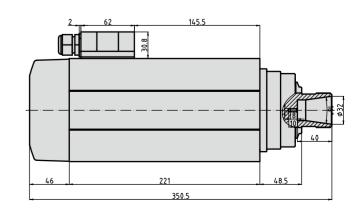


PSPMF60-18Z6.0





Speed	18000RPM
Rated power	6.0KW
Torque	3.18Nm
Voltage	220/380V
Current	21/12A
Frequency	300/400HZ
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	12Kg



Square air-cooled spindle



Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7004C P4
weight	16Kg
2 62 88 88	145.5

Speed

Voltage

Current

Frequency

Rated power Torque

62	
3.5	30.8
	120.5
	.
	09
103	

18000RPM 7.5KW

3.98Nm

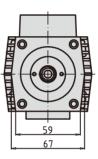
380V

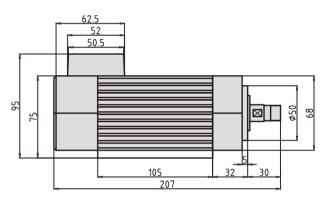
15A 300HZ

Square air-cooled spindle



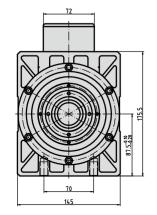
Speed	20000RPM
Rated power	0.8KW
Torque	0.18Nm
Voltage	220V
Current	12A
Frequency	333 HZ
Shaft end connection	ER11-Φ3.175-Φ7.0
Cooling	Air-cooled
Lubrication	Grease
Bearing model	1*6003NSK,1*6002NSK
weight	2.8Kg

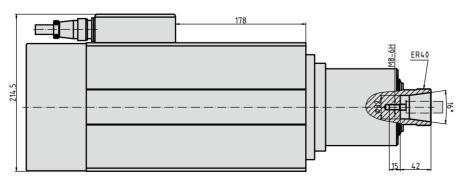






Speed	18000RPM
Rated power	13.5KW
Torque	2.39Nm
Voltage	220/380V
Current	15/9.0A
Frequency	300HZ
Shaft end connection	ER40-3.175-26
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7010C P4,2*7007C P4
weight	39Kg





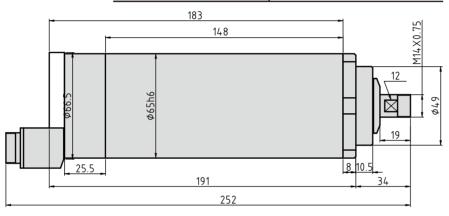
B-5 B-6

Circular air-cooled spindle

PSPMF65-24Z0.8



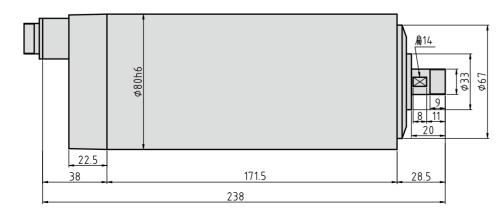
Speed	24000RPM
Rated power	0.8KW
Torque	0.22Nm
Voltage	220/380V
Current	3.0/1.6A
Frequency	400HZ
Shaft end connection	ER11-Ф3.175-Ф7.0
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7002C P4,2*7000C P4
weight	3Kg



PSPMF80-24Z1.5



Speed	24000RPM
Rated power	1.5KW
Torque	0.38Nm
Voltage	220/380V
Current	5.6/3.0A
Frequency	400HZ
Shaft end connection	ER11-Φ3.175-Φ7.0
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7002C P4,2*7002C P4
weight	4Kg

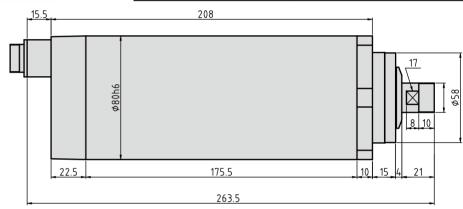


Circular air-cooled spindle

PSPMF80-24Z2.2



Speed	24000RPM
Rated power	2.2KW
Torque	0.58Nm
Voltage	220/380V
Current	7.6/4.4A
Frequency	400 HZ
Shaft end connection	ER16-Φ3.175-Φ10.0
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7004C P4.1*7002C P4
weight	4.5Kg

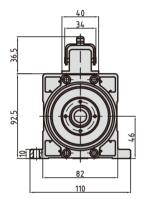


■ B-7 B-8

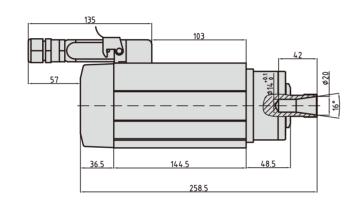
Air Cooled mounting spindle

PSPMF46-18Z1.5





Speed	18000/24000RPM
Rated power	1.5KW
Torque	0.8/0.6Nm
Voltage	220/380V
Current	5.6/3A
Frequency	300/400HZ
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	6Kg

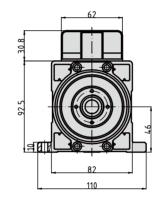


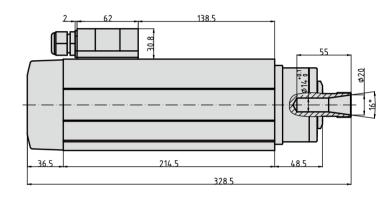
Air Cooled mounting spindle

PSPMF46-18Z3.5



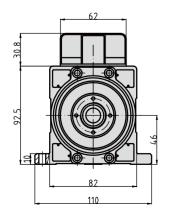
Speed	18000/21000RPM
Rated power	3.5KW
Torque	1.59/1.36Nm
Voltage	220/380V
Current	12/7A
Frequency	300/400HZ
Shaft end connection	ER20-Ф3.175-Ф16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,2*7002C P4
weight	8Kg



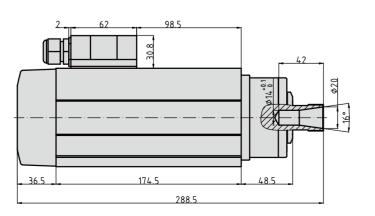


PSPMF46-18Z2.2



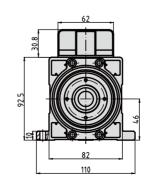


Speed	18000/24000RPM
Rated power	2.2KW
Torque	1.17/0.88Nm
Voltage	220/380V
Current	7.8/4.4A
Frequency	300/400HZ
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	7Kg

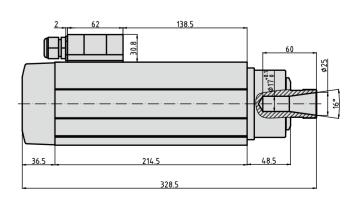


PSPMF46-18Z3.5





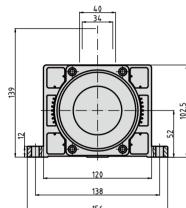
Speed	18000/21000RPM
Rated power	3.5KW
Torque	1.59/1.36Nm
Voltage	220/380V
Current	12/7A
Frequency	300/400HZ
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7007C P4,2*7002C P4
weight	8Kg



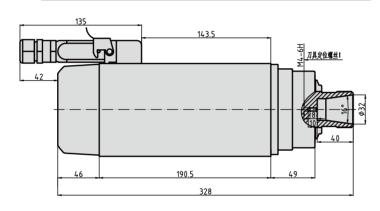
Air Cooled mounting spindle

PSPMF52-18Z5.0





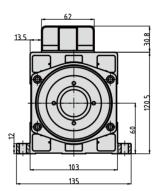
Speed	18000RPM
Rated power	5KW
Torque	2.65Nm
Voltage	380V
Current	11A
Frequency	600HZ
Shaft end connection	ER32-Φ3.175-Φ20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7002C P4
weight	12Kg



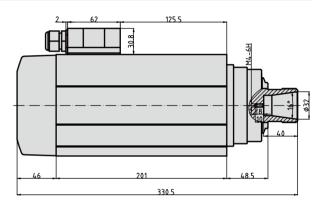
Air Cooled mounting spindle

PSPMF60-18Z4.5

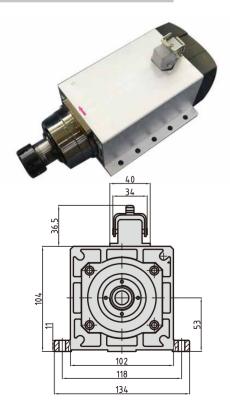




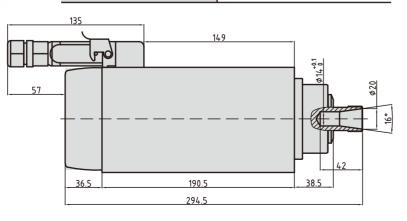
Speed	18000RPM
Rated power	4.5KW
Torque	2.39Nm
Voltage	220/380V
Current	15/9A
Frequency	300HZ
Shaft end connection	ER32-Φ3.175-Φ20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7002C P4
weight	12Kg



PSPMF53-1873 5

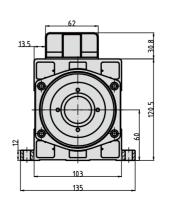


Speed	18000RPM
Rated power	3.5KW
Torque	1.33Nm
Voltage	380V
Current	7.8A
Frequency	300HZ
Shaft end connection	ER20-Φ3.175-Φ16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7005C P4,1*7002C P4
weight	8Kg

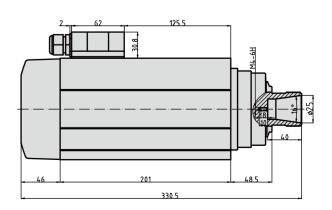


|PSPMF60-18Z4.5





Speed	18000/24000RPM
Rated power	4.5KW
Torque	2.39/1.79Nm
Voltage	220/380V
Current	15/9A
Frequency	300/400HZ
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7007C P4,2*7002C P4
weight	12Kg



■ B-12 ■ B-12 ■

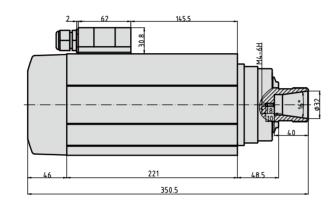
Air Cooled mounting spindle

PSPMF60-18Z6.0



13.5		62			30.8
_			Z		120.5
				3 110	12
	-	103			

Speed	18000RPM
Rated power	6KW
Torque	3.18Nm
Voltage	220/380V
Current	21/12A
Frequency	300HZ
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7002C P4
weight	13Kg

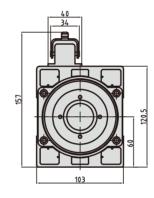


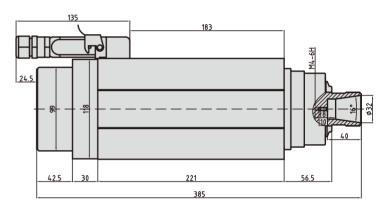
Air Cooled mounting spindle

PSPMF60-18Z5.5



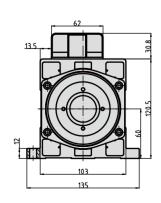
Speed	18000RPM
Rated power	5.5KW
Torque	2.65Nm
Voltage	220/380V
Current	21.5/12.5A
Frequency	300HZ
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7002C P4
weight	13Kg



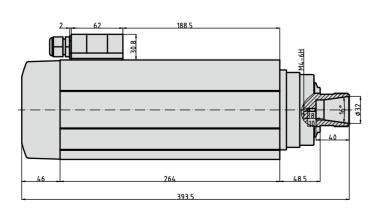


PSPMF60-1877 5



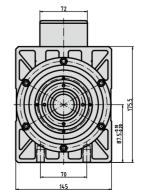


Speed	18000RPM
Rated power	7.5KW
Torque	3.98Nm
Voltage	380V
Current	15A
Frequency	300HZ
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7008C P4,2*7004C P4
weight	16Kg

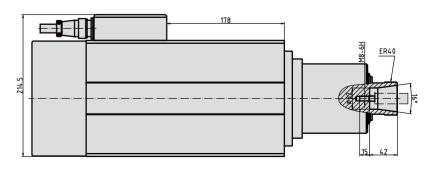


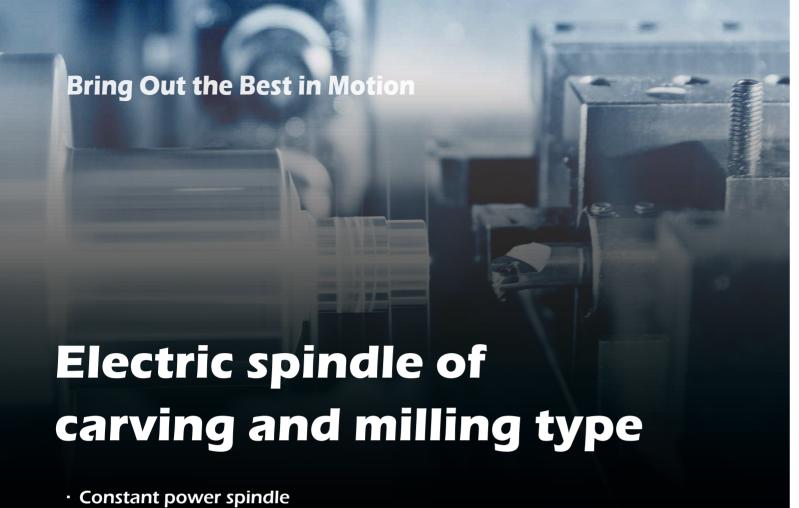
PSPMF87-18713 5





Speed	18000RPM
Rated power	13.5KW
Torque	6.36Nm
Voltage	380V
Current	31A
Frequency	600HZ
Shaft end connection	ER40-Φ3.175-Φ26
Cooling	Air-cooled
Lubrication	Grease
Bearing model	2*7010C P4,2*S7007C P4
weight	39Kg



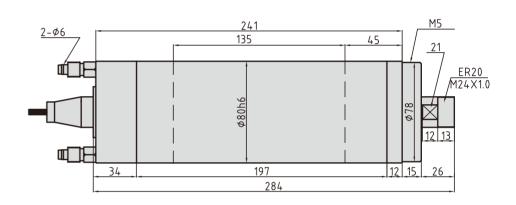


- · Constant Torque spindle
- · Drilling machine spindle



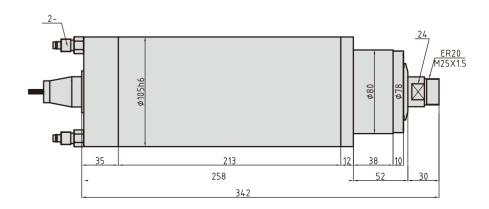


Speed	12000-24000RPM
Rated power	1.2KW
Torque	0.96-0.48Nm
Voltage	156-220V
Current	6.4A
Frequency	400-800HZ
Number of poles	4P
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7005C P4,2X7002C P4
Weight	8Kg





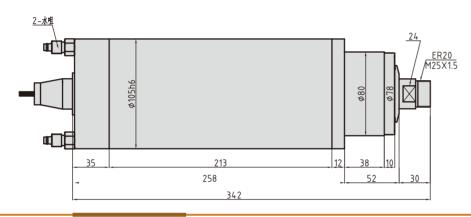
Speed	12000-24000RPM
Rated power	1.2KW
Torque	0.96-0.48Nm
Voltage	156-220V
Current	6.4A
Frequency	400-800HZ
Number of poles	4P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7005C P4,2X7002C P4
Weight	8Kg



PSPMK105-9-21Z2.2-5.0



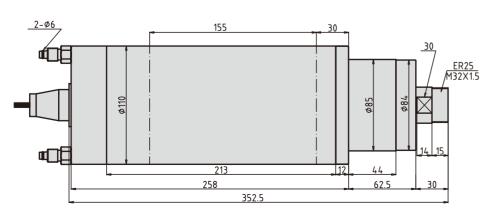
Speed	9000-21000RPM
Rated power	2.2KW
Torque	2.33-1Nm
Voltage	249-380V
Current	6.0A
Frequency	150-350HZ
Number of poles	2P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7006C P4,2X7004C P4
Weight	15Kg



PSPMK110-9-1872 2-4 4



Speed	9000-18000RPM
Rated power	2.2KW
Torque	2.33-1.17Nm
Voltage	249-380V
Current	6.0A
Frequency	150-300HZ
Number of poles	2P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7004C P4
Weight	16Kg

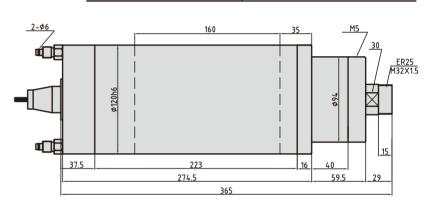


Constant power spindle

SPMK120-9-18Z4.0-8.0



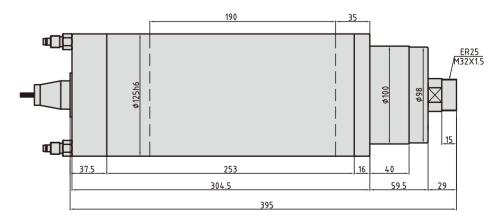
6 1	
Speed	9000-18000RPM
Rated power	4KW
Torque	4.24-2.12Nm
Voltage	269-380V
Current	12.5A
Frequency	450-900HZ
Number of poles	6P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	21Kg



PSPMK120-9-1875 5-1



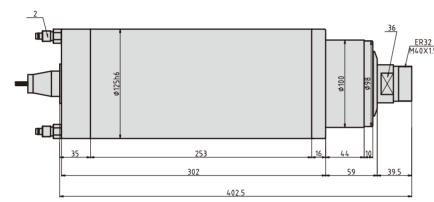
Speed	9000-18000RPM
Rated power	5.5KW
Torque	5.84-2.92Nm
Voltage	269-380V
Current	15.5A
Frequency	450-900HZ
Number of poles	6P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	24Kg



PSPMK125-9-15Z5.5-11

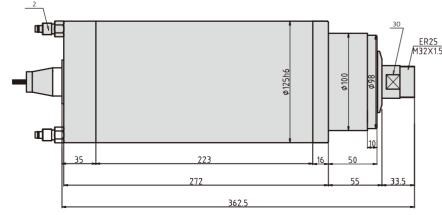


Speed	9000-15000RPM
Rated power	5.5KW
Torque	5.84-3.5Nm
Voltage	249-380V
Current	14A
Frequency	450-750HZ
Number of poles	6P
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7009C P4,2X7005C P431
Weight	31Kg





Speed	9000-18000RPM
Rated power	4KW
Torque	4.24-2.12Nm
Voltage	269-380V
Current	12.5A
Frequency	450-900HZ
Number of poles	6P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	25Kg

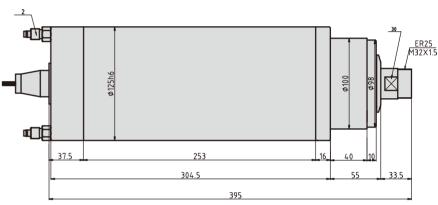


Constant power spindle

PSPMK125-9-18Z5.5-11



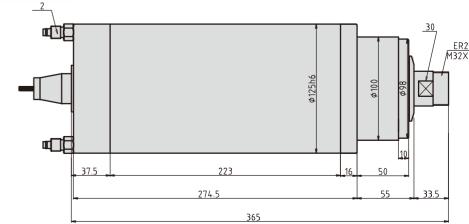
Speed	9000-18000RPM
Rated power	5.5KW
Torque	5.84-2.92Nm
Voltage	269-380V
Current	15.5A
Frequency	450-900HZ
Number of poles	6P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	31Kg



PSPMK125-12-24Z4.0-8.0



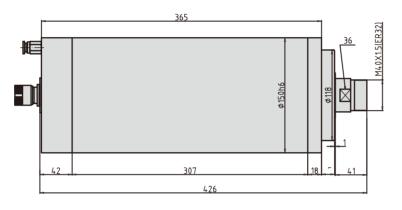
Speed	12000-24000RPM
Rated power	4KW
Torque	3.18-1.59Nm
Voltage	380V
Current	8.9A
Frequency	200-400HZ
Number of poles	2P
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	25Kg



PSPMK150-6-12Z5.5-11



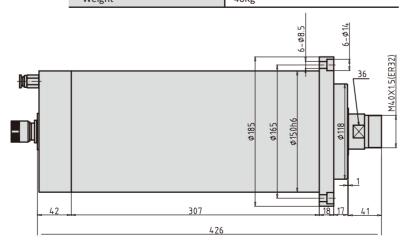
Speed	6000-12000RPM
Rated power	5.5KW
Torque	8.75-4.38Nm
Voltage	269-380V
Current	14.8A
Frequency	200-400HZ
Number of poles	4P
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7009C P4,2X7007C P4
Weight	46Kg



PSPMK150-6-12Z5.5-11B



Speed	6000-12000RPM
Rated power	5.5KW
Torque	8.75-4.38Nm
Voltage	269-380V
Current	14.8A
Frequency	200-400HZ
Number of poles	4P
Shaft end connection	ER40-Φ3.175-Φ26
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7010C P4,2X7007C P4
Weight	46Kg

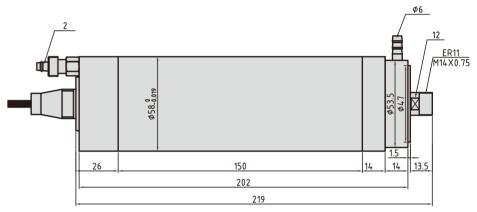


Constant Torque spindle

PSPMK58-24Z0.8



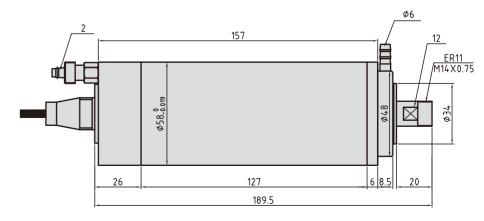
Speed	24000RPM
Rated power	0.8KW
Torque	0.32Nm
Voltage	220V
Current	3A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER11-Φ3.175-Φ7.0
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7002C P4,1X7000C P4
Weight	3Kg



PSPMK58-24Z0.8D



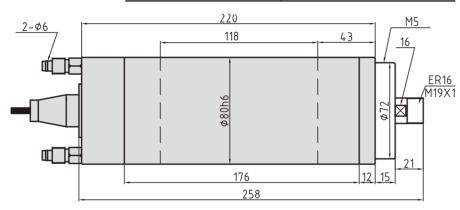
Speed	24000RPM
Rated power	0.8KW
Torque	0.25Nm
Voltage	220V
Current	3A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER11-Φ3.175-Φ7.0
Cooling	Water-cooled
lubrication	Grease
Bearing model	1X7007C P4,1X7000C P4
Weight	2.5Kg



PSPMK80-24Z1.5



Speed	24000RPM
Rated power	1.5KW
Torque	0.6Nm
Voltage	220/380V
Current	5.6/3A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER16-Φ3.175-Φ10
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7004C P4,2X7001C P4
Weight	6Kg

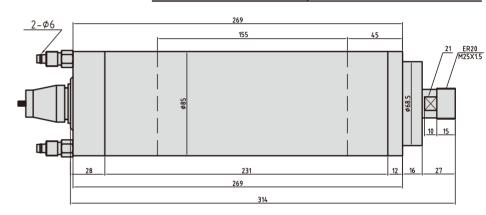


Constant Torque spindle

PSPMK85-24Z2.2-BJ



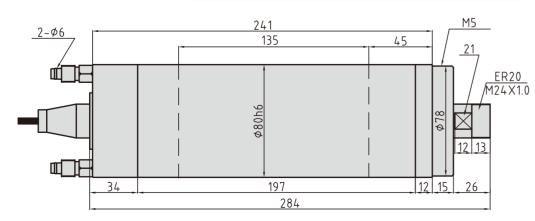
Speed	24000RPM
Rated power	2.2KW
Torque	0.88Nm
Voltage	220/380V
Current	7.6/4.4A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7005C P4,1X7002C P4
Weight	10Kg



PSPMK80-2472 2



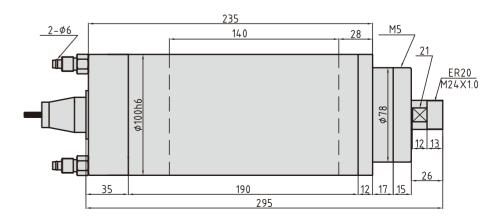
Speed	24000RPM
Rated power	2.2KW
Torque	0.8Nm
Voltage	220/380V
Current	7.6/4.4A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7005C P4,2X7002C P4
Weight	8Kg



PSPMK100-24Z3.2



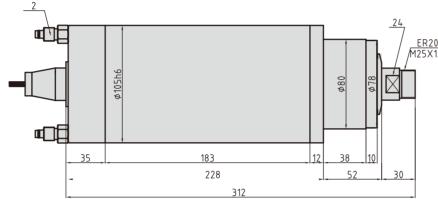
Speed	24000RPM
Rated power	3.2KW
Torque	1.27Nm
Voltage	220/380V
Current	11/6.4A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7005C P4,2X7003C P4
Weight	9Kg



PSPMK105-21Z3.5



Speed	21000RPM
Rated power	3.5KW
Torque	1.59Nm
Voltage	220/380V
Current	12.1/7A
Frequency	350HZ
Number of poles	2P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7006C P4,2X7004C P4
Weight	12Kg

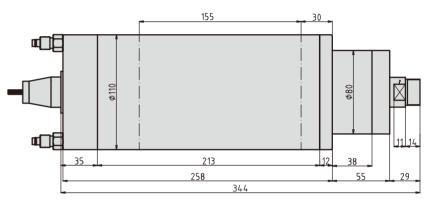


Constant Torque spindle

PSPMK110-24Z4.0



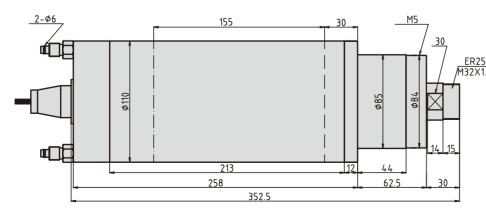
Speed	24000RPM
Rated power	4KW
Torque	1.59Nm
Voltage	220/380V
Current	14/8A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7006C P4,1X7004C P4
Weight	13Kg



PSPMK110-1874 (



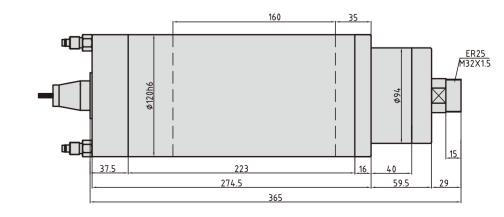
Speed	18000RPM
Rated power	4.0KW
Torque	2.12Nm
Voltage	220/380V
Current	14/8A
Frequency	300HZ
Number of poles	2P
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7004C P4
Weight	16Kg



PSPMK120-18Z5.5

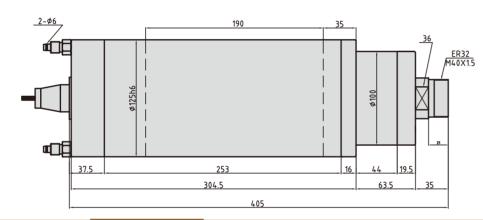


Speed	18000RPM
Rated power	5.5KW
Torque	2.92Nm
Voltage	220/380V
Current	19/11A
Frequency	300HZ
Number of poles	2P
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	21Kg





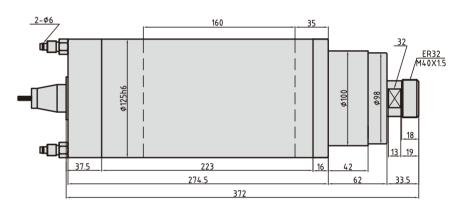
Speed	15000RPM
Rated power	9KW
Torque	5.73Nm
Voltage	220/380V
Current	31/18A
Frequency	750HZ
Number of poles	6P
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7009C P4,2X7005C P4
Weight	31Kg





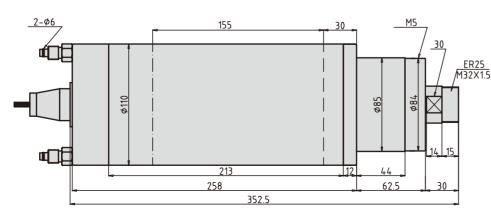


_		
	Speed	18000RPM
	Rated power	6.5KW
	Torque	3.45Nm
	Voltage	220/380V
	Current	22.5/13A
Ī	Frequency	300HZ
	Number of poles	2P
	Shaft end connection	ER32-Ф3.175-Ф20
Ī	Cooling	Water-cooled
	lubrication	Grease
	Bearing model	2X7008C P4,2X7005C P4
	Weight	25Kg



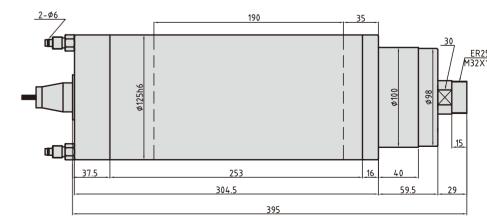


Speed	18000RPM
Rated power	5.5KW
Torque	2.92Nm
Voltage	220V
Current	19A
Frequency	300HZ
Number of poles	2P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	25Kg





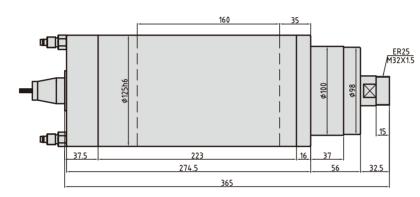
Speed	18000RPM
Rated power	7.5KW
Torque	3.98Nm
Voltage	220/380V
Current	28/16A
Frequency	900HZ
Number of poles	6P
Shaft end connection	ER25-Φ3.175-Φ16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	31Kg



PSPMK125-24Z5.5



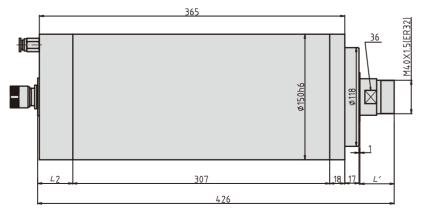
Speed	24000RPM
Rated power	5.5KW
Torque	2.19Nm
Voltage	380V
Current	11A
Frequency	400HZ
Number of poles	2P
Shaft end connection	ER25-Ф3.175-Ф16
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7007C P4,2X7005C P4
Weight	25Kg



PSPMK150-1271



	Speed	12000RPM
Ī	Rated power	11KW
	Torque	8.75Nm
	Voltage	380V
Ī	Current	22A
	Frequency	400HZ
	Number of poles	4P
Ī	Shaft end connection	ER32-Ф3.175-Ф20
	Cooling	Water-cooled
	lubrication	Grease
	Bearing model	2X7209C P4,2X7007C P4
Ī	Weight	46Kg

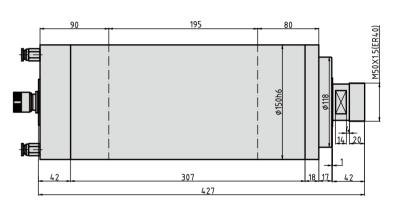


Constant Torque spindle

SPMK150-12Z11B



Speed	12000RPM
Rated power	11KW
Torque	8.75Nm
Voltage	380V
Current	22A
Frequency	400HZ
Number of poles	4P
Shaft end connection	ER40-Φ3.175-Φ26
Cooling	Water-cooled
lubrication	Grease
Bearing model	2X7010C P4,2X7007C P4
Weight	46Kg

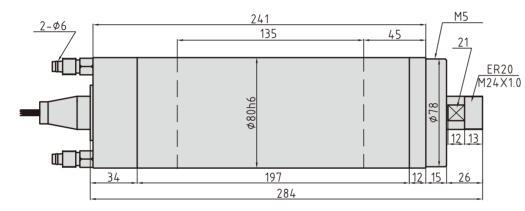


Drilling machine spindle

PSPMK80-12Z2.2



Speed	1500-12000RPM
Rated power	2.2KW
Voltage	220V
Current	6.4A
Frequency	50-400HZ
Number of poles	4P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2*7005C P4,2*7002C P4
Weight	7Kg

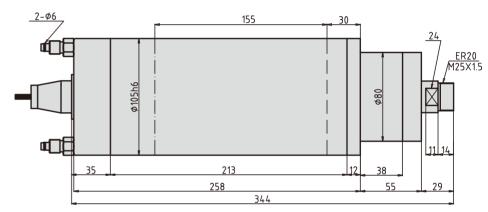


Drilling machine spindle

PSPMK105-18Z4.5



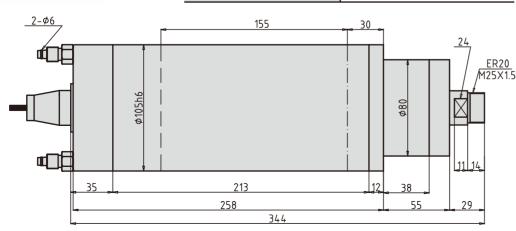
Speed	1800-18000RPM
Rated power	4.5KW
Voltage	380V
Current	9.6A
Frequency	30-300HZ
Number of poles	2P
Shaft end connection	ER20-Φ3.175-Φ13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2*7006C P4,2*7004C P4
Weight	15.5Kg



PSPMK105-973 0



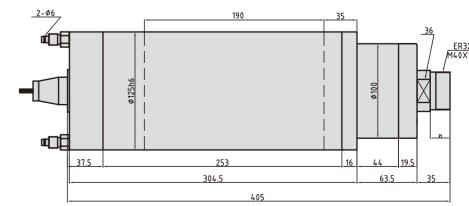
Speed	1200-9000RPM
Rated power	3.0KW
Voltage	220V
Current	9.6A
Frequency	20-150HZ
Number of poles	2P
Shaft end connection	ER20-Ф3.175-Ф13
Cooling	Water-cooled
lubrication	Grease
Bearing model	2*7006C P4,2*7004C P4
Weight	15.5Kg



PSPMK125-975 5



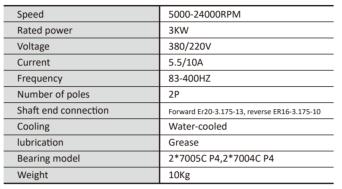
Speed	800-9000RPM
Rated power	5.5KW
Voltage	380V
Current	11A
Frequency	40-450HZ
Number of poles	6P
Shaft end connection	ER32-Ф3.175-Ф20
Cooling	Water-cooled
lubrication	Grease
Bearing model	2*7009C P4,2*7005C P4
Weight	31Kg

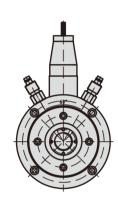


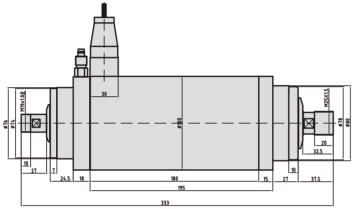
Cobalt bed spindle

PSPMZ-30S









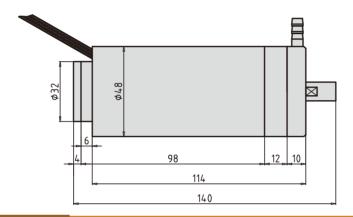




PSPMZ-11



Dimensions	48*120pm/m
Speed	10000-60000RPM
Power	0.09/0.1KW
Voltage	36V
Current	0.6-1.5A
Frequency	160-1000HZ
Bearing	C136018JN, C136100JN
Chuck	ER8 or Carved small chuck
Cooling method	Self-cooling
Lubrication method	Grease
Number of phases	3

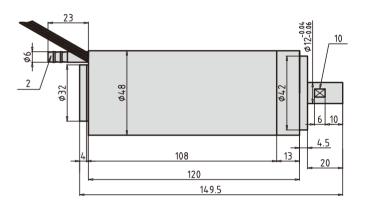


Wood Working Withwater-Cooled Spindle

PSPMZ-12



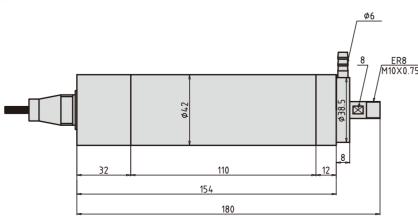
Dimensions	Ф48*130Фт/т
Speed	10000-60000RPM
Power	0.3Kw
Voltage	75V
Current	2-5A
Frequency	160-1000HZ
Bearing	C136101JN,C136018JN
Chuck	ER8 or Carved small chuck
Cooling method	Water cooling
Lubrication method	Grease
Number of phases	3



PSPM7-11-1



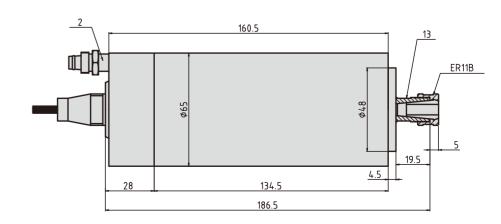
Dimensions	Ф42*176Фт/т
Speed	10000-60000RPM
Power	0.07KW
Voltage	36V
Current	1.6A
Frequency	167-667HZ
Bearing	C136018JN,C136100JN
Chuck	ER8 or Carved Small chuck
Cooling method	Self-cooling
Lubrication method	Grease
Number of phases	2



PSPM7-15



Dimensions	48*120pm/m
Speed	10000-60000RPM
Power	0.09/0.1KW
Voltage	36V
Current	0.6-1.5A
Frequency	160-1000HZ
Bearing	C136018JN, C136100JN
Chuck	ER8 or Carved small chuck
Cooling method	Self-cooling
Lubrication method	Grease
Number of phases	3

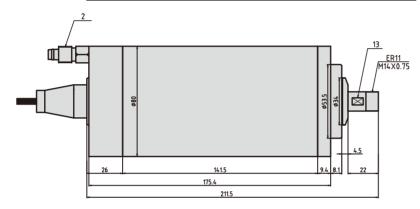


□ | D-2 | D-3 | ■

PSPMZ-17



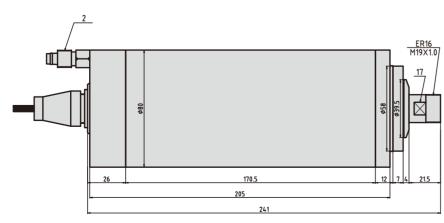
Dimensions	Ф80*180 Фт/т
Speed	24000RPM
Power	1.5KW
Voltage	220V
Current	6A
Frequency	400HZ
Bearing	7002C/P4*2
Chuck	ER11
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-17B



Dimensions	Φ80*225Φm/m
Speed	24000RPM
Power	1.5KW
Voltage	220V
Current	8A
Frequency	400HZ
Bearing	7004C/P4*2,6002C/P4*2
Chuck	ER16
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3

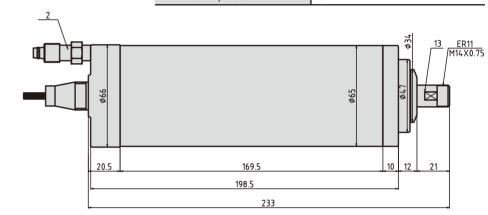


Wood Working Withwater-Cooled Spindle

PSPMZ-18



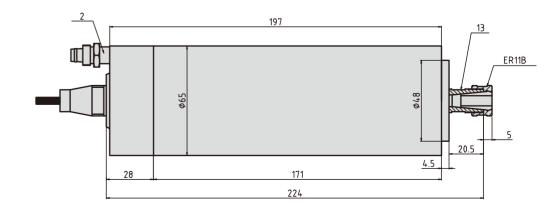
Dimensions	Φ65*200Φm/m
Speed	24000RPM
Power	1.5KW
Voltage	220V
Current	5A
Frequency	400HZ
Bearing	7002C/P*2,7001C/P*1
Chuck	ER11
Cooling method	Water cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-18-2



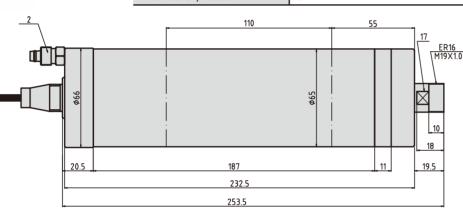
Dimensions	Ф65*210Фт/т
Speed	24000RPM
Power	0.8KW
Voltage	220V
Current	5A
Frequency	400HZ
Bearing	7002C/P4*2,7000C/P4*2
Chuck	ER11
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-18B



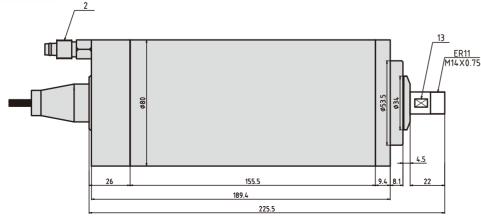
Dimensions	Ф65*230 Фт/т
Speed	24000RPM
Power	1.5KW
Voltage	220V
Current	5A
Frequency	400HZ
Bearing	7004C/P*2 ,7001C/P*2
Chuck	ER16
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



DCDM7 40

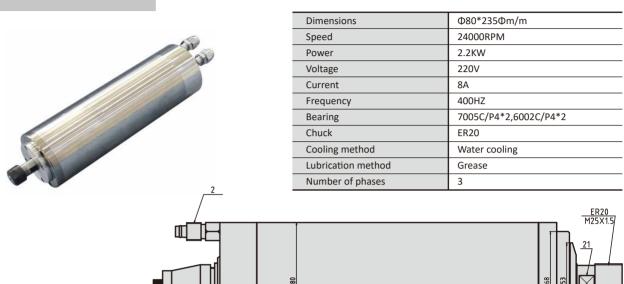


Dimensions	Ф80*225Фm/m
Speed	24000RPM
Power	1.5KW
Voltage	220V
Current	8A
Frequency	400HZ
Bearing	7004C/P4*2,6002C/P4*2
Chuck	ER16
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



Wood Working Withwater-Cooled Spindle

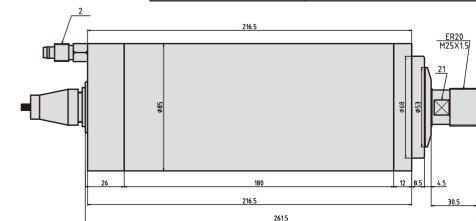
PSPMZ-23



PSPM7-23-1



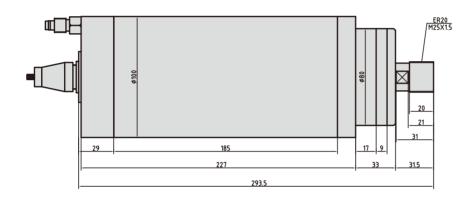
Dimensions	Φ85*215Φm/m
Speed	24000RPM
Power	2.2KW
Voltage	380V
Current	8A
Frequency	400HZ
Bearing	7005C/P4*2,6002C/P4*1
Chuck	ER20
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-24-1



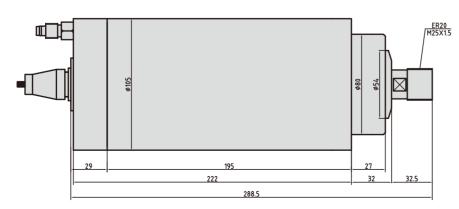
Dimensions	Ф100*250Фm/m
Speed	24000RPM
Power	3.2/2.2KW
Voltage	220/380V
Current	10-12A
Frequency	400HZ
Bearing	7005C/P4*2,7003C/P4*1
Chuck	ER20
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-24-2



Dimensions	Ф105*250Фm/m
Speed	24000RPM
Power	2.2KW
Voltage	220/380V
Current	10A
Frequency	100-400HZ
Bearing	7005C/P4*2,7003C/P4*1
Chuck	ER20
Cooling method	Water cooling
Lubrication method	Grease
Number of phases	3

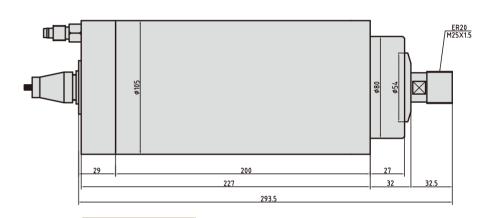


Wood Working Withwater-Cooled Spindle

PSPMZ-24-3



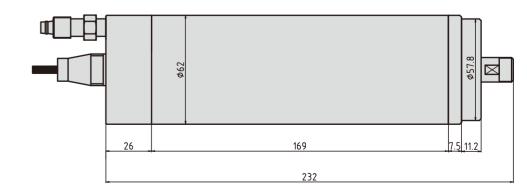
Dimensions	Ф105*250Фm/m
Speed	24000RPM
Power	3KW
Voltage	380/220V
Current	12A
Frequency	400HZ
Bearing	7005C/P4*2,7003C/P4*1
Chuck	ER20
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPM7-26



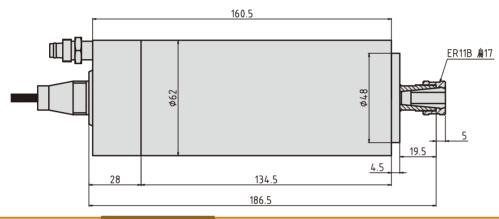
Dimensions	Ф100*250Фm/m
Speed	24000RPM
Power	3.2/2.2KW
Voltage	220/380V
Current	10-12A
Frequency	400HZ
Bearing	7005C/P4*2,7003C/P4*1
Chuck	ER20
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-26-



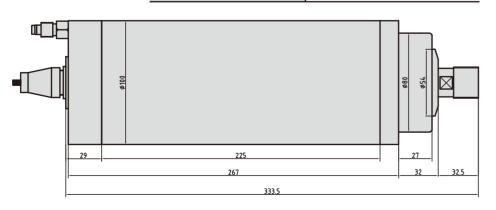
Dimensions	Φ62*160Φm/m
Speed	24000RPM
Power	0.8KW
Voltage	220V
Current	5A
Frequency	400HZ
Bearing	7002C/P4*1,7000C/P4*1
Chuck	ER11
Cooling method	Water-cooling
Lubrication method	Grease
Number of phases	3



PSPMZ-27



Dimensions	Φ100*300Φm/m
Speed	24000RPM
Power	3.7/4.0/4.5KW
Voltage	380V
Current	12-16A
Frequency	400HZ
Bearing	7005CETA/P4*2,7003CETA/P4*2
Chuck	ER20
Cooling method	Water cooling
Lubrication method	Grease
Number of phases	3





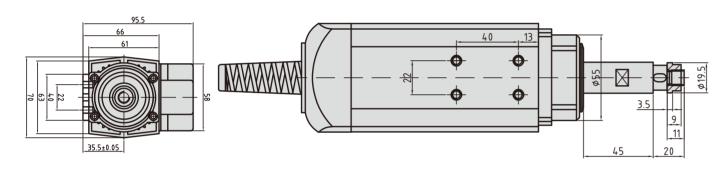
D-10 E-1

Edge-Sealing Air Cooling Spindle

PSPMF36-12Z0.35L



Speed	12000RPM
Rated power	0.35KW
Torque	0.28Nm
Voltage	220/380V
Current	1.8/1.1A
Frequency	200HZ
Bearing	1*6003VV P4/1*6000VVP4
Shaft end link	15 cylinder-M12 left tooth
Cooling method	fan
Lubrication method	Grease
Weight	2.3Kg

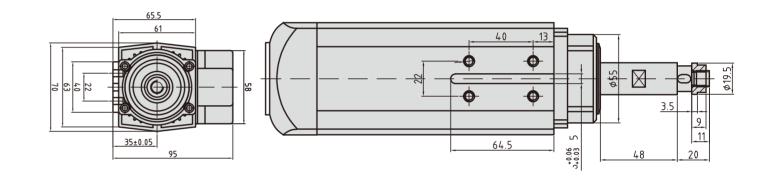


Edge-Sealing Air Cooling Spindle

PSPMF36-18Z0.75L



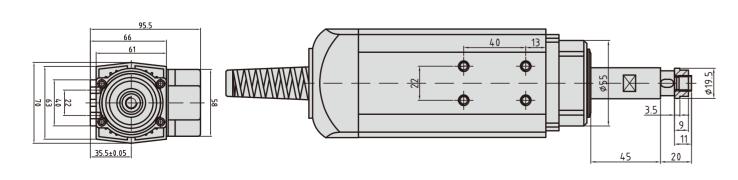
Speed	18000RPM
Rated power	0.75KW
Torque	0.4Nm
Voltage	220/Y380V
Current	3.9/2.3A
Frequency	300HZ
Bearing	1*6005VV P4/1*6000VVP4
Sha⊠ end link	middle 16 cylindrical key 5-M6 le⊠ tooth
Cooling method	fan
Lubrica⊠on method	Grease
Weight	2.8Kg



PSPMF36-1270 35R



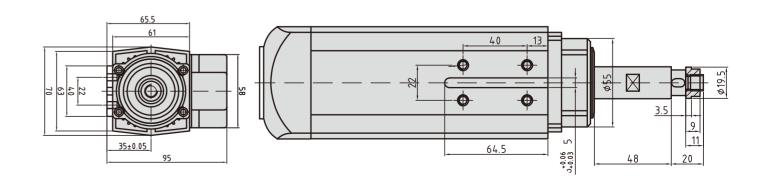
Speed	12000RPM
Rated power	0.35KW
Torque	0.28Nm
Voltage	220/Y380V
Current	1.8/1.1A
Frequency	200HZ
Bearing	1*6003VV P4/1*6000VVP4
Shaft end link	15 cylinder-M12 right tooth
Cooling method	fan
Lubrication method	Grease
Weight	2.3Kg



PSPMF36-1870 75R



Speed	18000RPM
Rated power	0.75KW
Torque	0.4Nm
Voltage	220/Y380V
Current	3.9/2.3A
Frequency	300HZ
Bearing	1*6005VV P4/1*6000VVP4
Sha⊠ end link	Middle 16 cylindrical key 5-M6 right tooth
Cooling method	Fan
Lubrica⊠on method	Grease
Weight	2.8Kg





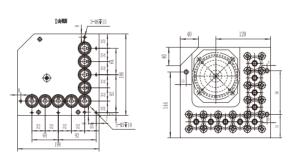


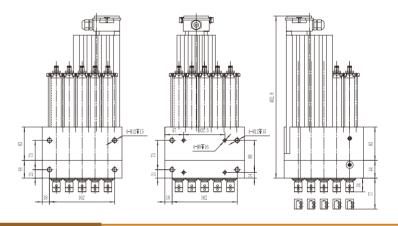
CNC drilling

PCNCD-9



5°C-40°C
7-9bar
ISO FLEX TOPAS Nb52
9
5
4
Ф10
32mm
3200RPM

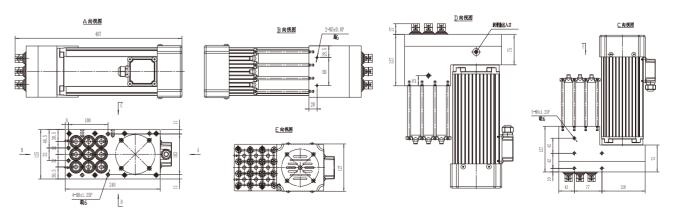




PCNCD-V3X3



Feed air Pressure T-9bar Lubrification gear ISO FLEX TOPAS L32N Vertical Gear Shaft 9 Arrangement Mode 3X3 Air Cylinder Move Range 58mm	Working Environment Temperatur	5°C-40°C
Vertical Gear Shaft 9 Arrangement Mode 3X3 Air Cylinder Move Range 58mm	Feed air Pressure	7-9bar
Arrangement Mode 3X3 Air Cylinder Move Range 58mm	Lubrification gear	ISO FLEX TOPAS L32N
Air Cylinder Move Range 58mm	Vertical Gear Shaft	9
, , , , , , , , , , , , , , , , , , ,	Arrangement Mode	3X3
Table seveline	Air Cylinder Move Range	58mm
ioois coupling Φ10	Tools coupling	Ф10
Center Hole Distance 32mm	Center Hole Distance	32mm
Vertical spindles speed 4500RPM	Vertical spindles speed	4500RPM

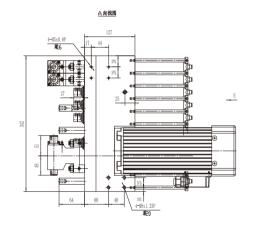


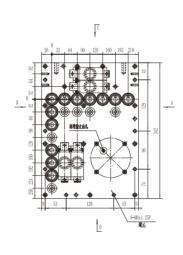
CNC drilling

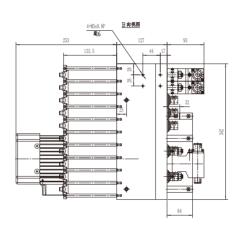
PCNCD-V12H4L/R

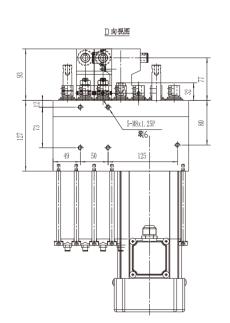


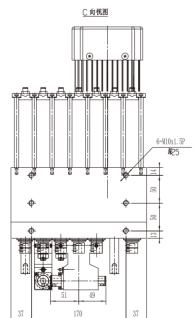
Working Environment Temperatur	5°C-40°C
Feed air Pressure	7.5bar
Center Hole Distance	32mm
Drive Motor Ramp-up Speed	0-Rpm max>2s
Vertical Spindle Stroke	68mm
Horizontal Spindle Stroke	68mm
Rpm Vertical Spindle	4500 max
Vertical Spindle's Tool Housing	Ф10mm
Rpm Horizontal Spindle	4500 max
Horzontal Spindle's Too Housing	Ф10mm
Type of Lubrication	grease
Lubricant Model	ISO FLEX TOPAS L32N

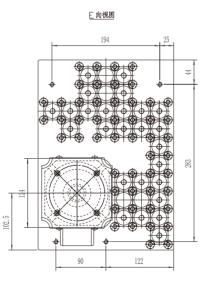










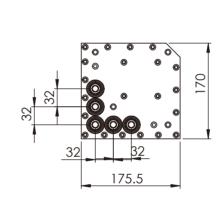


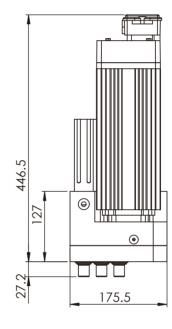
CNC drilling

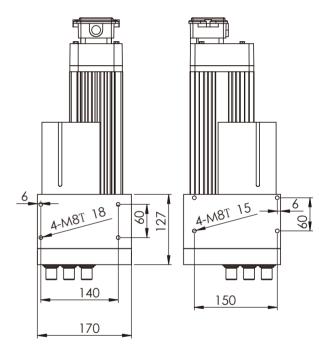
PCNCD-V5H5



Shaft extension stroke	60/70mm
Vertical drilling speed	3300rpm Max
Horizontal drilling speed	3300rpm Max
Motor power	1.7kw/2.2kw
Voltage	380V
Solenoid voltage	24V
Working medium	Compressed air
Air Pressure	0.6-0.8MPa
PiPe connector of solenoid valve	P4







■|F-3

