SPINDLE MOTOR

Air Cooling Spindle with Square Body

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine.

Features

1. With high precision --Adopt ER series collet nut, has the unique features of high precision.

2. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of electric spindles are greatly improved and the RPM can reach 24000r/min. It can provide strong support for high efficiency and high precision processing of CNC.

3. High precision dynamic balancing testing is conducted on all rotable parts, with the tolerance value of less than G0.4.

4. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTF47-82-1.5
KW: 1.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 5.8 / 3.2
Collet: ER20

ATOSTF47-82-2.2
KW: 2.2
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 7.9 / 4.6
Collet: ER20

ATOSTF47-82-3.5
KW: 3.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 12.1 / 7.2
Collet: ER25

ATOSTF60-103-4.5
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 15.2 / 9.1
Collet: ER32

ATOSTF60-103-6.0
KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 21.1 / 12.1
Collet: ER32

ATOSTF60-103-7.5
KW: 7.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 26.2 / 15.3
Collet: ER32

Air Cooling Spindle with Square & Flange Body

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine.

Features

1. Save costs and time--With flanges, customers can have fewer mounting plates and are more convenient.

2. With high precision --Adopt ER series collet nut, has the unique features of high precision.

3. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of electric spindles are greatly improved and the RPM can reach 24000r/min. It can provide strong support for high efficiency and high precision processing of CNC.

4. High precision dynamic balancing testing is conducted on all rotable parts, with the tolerance value of less than G0.4.

5. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTF36-110B-2.2
KW: 2.2
RPM: 18000
Hz: 300
Volt: 380
AMP: 4.6
Collet: ER20

ATOSTF36-110B-1.5
KW: 1.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 5.8 / 4.6
Collet: ER20

ATOSTF47-110B-2.2
KW: 2.2
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 7.9 / 4.6
Collet: ER20

ATOSTF53-134B-2.2
KW: 2.2
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 7.9 / 4.6
Collet: ER20

ATOSTF53-134B-3.5
KW: 3.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 12.1 / 7.2
Collet: ER25

ATOSTF52-156B-4.5
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 15.2 / 9.1
Collet: ER32

ATOSTF52-156B-6.0

KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP:21.1 / 12.1
Collet: ER32

ATOSTF52- I56B-7.5
KW: 7.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 26.2 / 15.3
Collet: ER32

ATOSTF52-135B-4.5
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP:15.1 /9.1
Collet: ER32

ATOSTF60-135B-6.0
KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP:21.1 / 12.1
Collet: ER32

Air Cooling Spindle with Independent Electric Fan

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine.

Features

1. Low noise--With independent electronic fan. It's more human and comfortable.

2. With high precision --Adopt ER series collet nut, has the unique features of high precision.

3. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of electric spindles are greatly improved and the RPM can reach 24000r/min. It can provide strong support for high efficiency and high precision processing of CNC.

4. High precision dynamic balancing testing is conducted on all rotable parts, with the tolerance value of less than G0.4.

5. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTF60-103-4.5D
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 15.0 / 9.8
Collet: ER32

ATOSTF60-103-6.0D
KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 21.5 / 12.0
Collet: ER32

ATOSTF52-156B-4.5D
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 15.0 / 9.8
Collet: ER32

ATOSTF52-156B-6.0D
KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 21.5 / 12.0
Collet: ER32

ATOSTF60-135B-4.5D
KW: 4.5
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 15.0 / 9.8
Collet: ER32

ATOSTF60-135B-6.0D
KW: 6.0
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 21.5 / 12.0
Collet: ER32

Air Cooling Spindle with Round Body

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine.

Features

1. Smaller and lighter body. This means it is cheaper than square air spindles.

2. With high precision--Adopt ER series collet nut, has the unique characteristics of high precision.

3. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of spindles are greatly improved and the RPM can reach 24000r/min. It can provide strong support for high efficiency and high precision processing of CNC.

4. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTF65-0.8
KW: 0.8
RPM: 24000
Hz: 400
Volt: 220
AMP: 2.5
Collet: ER11

ATOSTF80-1.5
KW: 1.5
RPM: 24000
Hz: 400
Volt: 220
AMP: 6.0
Collet: ER11

ATOSTF80-2.2
KW: 2.2
RPM: 24000
Hz: 400
Volt: 220
AMP: 8.0
Collet: ER20

Water Cooling Spindle for Wood/Plastic

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine. Especially suitable for woodworking machine.

Features

1. Low noise--With water cooling system. The noise is very low.

2. With high precision--Adopt ER series collet nut, has the unique characteristics of high precision.

3. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of electric spindles are greatly improved and the RPM can reach 24000 /min. It can provide strong support for high efficiency and high precision processing of CNC.

4. High precision dynamic balancing testing is conducted on all rotable parts, with the tolerance value of less than G0.4.

5. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTZ65-0.8
KW: 0.8
RPM: 24000
Hz: 400
Volt: 220
AMP: 2.5
Collet: ER11

ATOSTZ80-1.5
KW: 1.5
RPM: 24000
Hz: 400
Volt: 220
AMP: 6.0
Collet: ER11

ATOSTZ80-1.5
KW: 1.5
RPM: 24000
Hz: 400
Volt: 220
AMP: 6.0
Collet: ER16

ATOSTZ80-2.2
KW: 2.2
RPM: 24000
Hz: 400
Volt: 220 / 380
AMP: 9.0 / 5.1
Collet: ER20

ATOSTZ80-2.2L
KW: 2.2
RPM: 24000
Hz: 400
Volt: 220 / 380
AMP: 9.8 / 5.6
Collet: ER20

ATOSTZ100-3.2
KW: 3.2
RPM: 24000
Hz: 400
Volt: 220 / 380
AMP: 13.8 / 9.8
Collet: ER20

ATOSTZ100-3.7Z
KW: 3.7
RPM: 24000
Hz: 400
Volt: 380
AMP: 10
Collet: ER20

ATOSTZ105-3.7
KW: 3.7
RPM: 24000
Hz: 400
Volt: 380
AMP: 10
Collet: ER20

ATOSTZ125-5.5Z
KW: 5.5
RPM: 24000
Hz: 400
Volt: 380
AMP: 14.5
Collet: ER25

ATOSTZl 25-7.5Z
KW: 7.5
RPM: 24000
Hz: 400
Volt: 380
AMP: 14.5
Collet: ER32

Water Cooling Spindle for Metal

Application

Milling, Engraving, Drilling in all kinds of CNC Router machine. Especially suitable for light metalworking machine.

Features

1. Low noise--With water cooling system. The noise is very low.
2. With high precision--Adopt ER series collet nut, has the unique characteristics of high precision.
3. P4 grade angular contact bearings or ceramic ball bearings are used. With such bearings, the strength and stiffness of electric spindles are greatly improved and the RPM can reach 24000 /min. It can provide strong support for high efficiency and high precision processing of CNC.
4. High precision dynamic balancing testing is conducted on all rotable parts, with the tolerance value of less than G0.4.
5. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATOSTM62-0.8
KW: 0.8
RPM: 24000
Hz: 400
Volt: 220
AMP: 3.0
Collet: ER11

ATOSTM80-1.5
KW: 1.5
RPM: 24000
Hz: 400
Volt: 220
AMP: 5.6
Collet: ER16

ATOSTM80-2.2
KW: 2.2
RPM: 24000
Hz: 400
Volt: 220
AMP: 7.5
Collet: ER20

Spindle for Edge Banding Machine

Application

Trimming, Milling, Engraving, Drilling in all kinds of edge banding machine and CNC machine.

Features

1. Small body —— It's more portable and comfortable.
2. The strength and stiffness of electric spindles are good. It can provide strong support for high efficiency and high precision processing of edge banding machine and CNC.
3. The airtight shaft bracket made of extruded aluminum raises the protection class of electric spindles to be IP50 and protects internal parts from the threat of dust.

ATO35-68-0.75-A
KW: 0.75
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 3.0 / 1.75

ATO35-68-0.37-A
KW: 0.37
RPM: 18000
Hz: 300
Volt: 220 / 380
AMP: 1.73 / 1

ATO40-63-0.75-B
KW: 0.75
RPM: 12000
Hz: 200
Volt: 220 / 380
AMP: 3.0 / 1.75

Tips Before Using All Spindles

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.

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 starting 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 15-30 minutes once a week at least.

Collet, nut and inner taper hole shall be washed clean when installing blades on the spindle in order to avoid any impact on the precision. The blade handle shall be inserted into the collet more than 15mm.

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 in order to recover its mechanical fatigue and prolong its life time.

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, especially the end of the spindle.

The spindle shall run in designated direction.

The spindle shall be installed and fixed according to the relevant drawings and instructions.

Detailed Planning

Elaborate Design

Constant Maintenance

Your Spindle Expert