Catalogue Servo spindle motor & Motorized spindle













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Established in 1994

50
Core Technologies

02 Invention patents

∠4
Patents for utility models

<u>COMPANY</u> <u>PROFILE</u>

Zhejiang New Folinn Electric Co.,Ltd, founded in 1994, is located at Wenling, the youngest costal city in China, a well-known manufacturing base in Yangtze River. Honored as a Zhejiang Hi-Tech Enterprise, we focus on R&D, manufacturing, sales and service for motor auto controlling products.

Folinn Company is specialized in manufacturing frequency inverter, Motor & Motorized spindle, Servo & Motion Control, Solar pump VFD/inverter and new energy products. Based on our own controlling technology and creative concept, we concentrate on driving technology improvement, device manufacture and update, devoting ourselves to providing every customer with the quality product and service and pushing this industry forward.

We stand on the principle of "Quality & Innovation is the industry's life", and realize it in our company moving steps, in order to keep ourselves and our customers growing together.

Folinn sales network has been reached out all major parts of China and some other countries in Europe, South-East Asia, Mid-East, America, and Oceania.



24
Software copyright

 $22000 \, \mathrm{m}^{2}$ Housing area

300000 Annual yield

China Top 10 Brand of Motor Control
CEEIA Council Member of Motor Control Industry
First Medium-voltage Motor Control Manufacturer in Zhejiang
National Torch Program Item
Zhejiang High-tech Enterprise
Zhejiang Famous Brand





KE series Motorized Spindle

Product characteristics

High speed and smooth, high torque at low speed, direct drive of CNC spindle system.

- High precision spindle mechanical structure, small spindle cone surface beating, the precision of the end surface beating is higher than similar lathe, used in applications with extremely high precision requirements
- Good control performance, fast servo response, accurate zero-speed locking position, high accuracy of indexing control
- High efficiency: higher than IE3 of IEC60034-30-2008 and level 2 energy efficiency of GB18613-2010
- Cow noise, low vibration, enhanced reliability
- Non-maintenance lubrication structure, high ability protection structure, low operating temperature rise, stable and reliable for a long time
- Optimized winding design and efficient cooling structure, so that the Motorized spindle has a strong and agile acceleration ability in the high-speed area
- Improved short time rated power and torque, enhanced short time recutting capability, so that reducing processing time

Applications

High-grade CNC machine tool: for example parallel motion machine tool, pentahedral processing center, small hole and microhole processing machine tool, etc. And also flexible processing Motorized spindle, grinding Motorized spindle, carving and milling Motorized spindle







CNC lathe

Horizontal Processing Centre

Vertical milling machine

Model description KE series Motorized spindle

$$\frac{K}{1} \frac{E}{2} - \frac{36}{3} \frac{D48}{4} - \frac{18}{5} \frac{2.2}{6} - \frac{\Box}{7}$$

| No. | Name | Description |
|-----|------|--|
| 1 | К | main mode name |
| 2 | E | Motorized spindle |
| 3 | 36 | maximum rotation diameter of Motorized spindle : 36 $	imes$ 10=360mm |
| 4 | D48 | shaft through-hole diameter :48mm |
| 5 | 18 | rated rotation speed 18×100rpm |
| 6 | 2.2 | rated power : 2.2kw |
| 7 | | encoder characteristics |

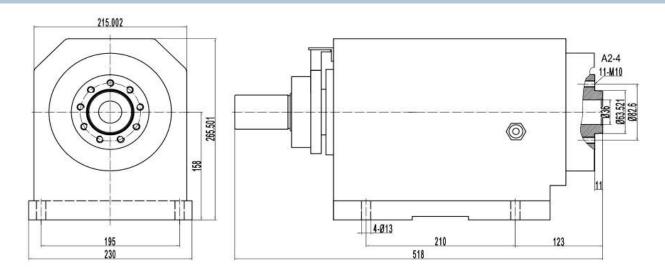
Motorized spindle KE-00D28

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------|-------------------|--------------------------------------|-----------------------------|-----------------------------|
| KE 00D20 100 75 | S1 | 0.75 | 1.5 | 3.98 | 200 | 1.75 | 1000 | 0000 | 0.004 |
| KE-00D28-180.75 | S6 | 1.1 | 1.5 | 5.84 | 380 | 2.42 | 1800 | 8000 | 0.004 |
| VE 00D20 120 FF | S1 | 0.55 | 1.1 | 4.04 | 380 | 1.3 | 1200 | 6000 | 0.004 |
| KE-00D28-130.55 | S6 | 0.75 | 1.1 | 5.51 | 380 | 1.7 | 1300 | 6000 | 0.004 |

Motorized spindle KE-30D28

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| WE 20000 101 F | S1 | 1.5 | 2.0 | 7.96 | 200 | 3.1 | 1000 | 0000 | 0.000 |
| KE-30D28-181.5 | S6 | 1.85 | 2.2 | 9.82 | 380 | 3.8 | 1800 | 8000 | 0.008 |
| KE 20020 121 1 | S1 | 1.1 | 1.5 | 8.08 | 200 | 2.28 | 1200 | 5000 | 0.0001 |
| KE-30D28-131.1 | S6 | 1.3 | 1.5 | 9.55 | 380 | 2.7 | 1300 | 6000 | 0.0081 |

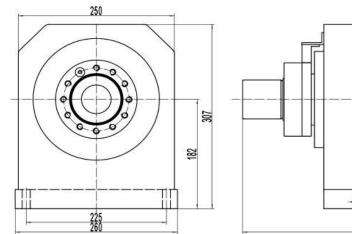
Motorized spindle KE-30D36



| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| WE 20020 101 F | S1 | 1.5 | 2.2 | 7.96 | 200 | 3.1 | 1000 | 0000 | 0.000 |
| KE-30D36-181.5 | S6 | 1.85 | 2.2 | 9.82 | 380 | 3.8 | 1800 | 8000 | 0.008 |
| KE-30D36-131.1 | S1 | 1.1 | 1.5 | 8.08 | 380 | 2.28 | 1300 | 6000 | 0.0081 |
| VE-20D30-131.1 | S6 | 1.3 | 1.5 | 9.55 | 360 | 2.7 | 1300 | 6000 | 0.0081 |

Motorized spindle KE-36D43

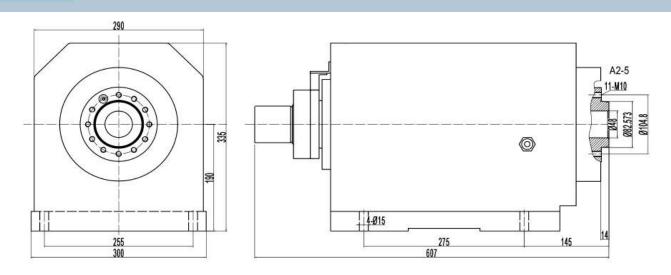
| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| WE 20D42 101 F | S1 | 1.5 | 2.2 | 7.96 | 200 | 3.1 | 1000 | 0000 | 0.000 |
| KE-36D43-181.5 | S6 | 1.85 | 2.2 | 9.82 | 380 | 3.8 | 1800 | 8000 | 0.008 |
| KE-36D43-131.1 | S1 | 1.1 | 1.5 | 8.08 | 380 | 2.28 | 1300 | 6000 | 0.0081 |
| KE-30D43-131.1 | S6 | 1.3 | 1.5 | 9.55 | 360 | 2.7 | 1300 | 8000 | 0.0001 |
| KE-36D43-182.2 | S1 | 2.2 | 3 | 11.7 | 380 | 4.28 | 1800 | 8000 | 0.0117 |
| NL-30D43-102.2 | S6 | 2.6 | 3 | 13.8 | 360 | 5 | 1800 | 8000 | 0.0117 |
| KE-36D43-131.5 | S1 | 1.5 | 2.2 | 11.0 | 380 | 2.9 | 1300 | 6000 | 0.011 |
| NE-30D43-131.3 | S6 | 1.85 | 2.2 | 13.6 | 360 | 3.68 | 1300 | 0000 | 0.011 |



| | | | | A2 | M10 |
|-------|-------|--------------|----------|---------|-------------------|
| | | | (| | Ø82.573 Ø104.8 |
| | | 4-Ø13 567 | 40 | 140 | |
| Rated | Rated | Rated | Base | Maximum | Moto |

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg · m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-------------------------------|
| L/E 20D 40 101 E | S1 | 1.5 | 2.2 | 7.96 | 200 | 3.1 | 1000 | 0000 | 0.000 |
| KE-36D48-181.5 | S6 | 1.85 | 2.2 | 9.82 | 380 | 3.8 | 1800 | 8000 | 0.008 |
| KE-36D48-131.1 | S1 | 1.1 | 1.5 | 8.08 | 380 | 2.28 | 1300 | 6000 | 0.0081 |
| NE-30D46-131.1 | S6 | 1.3 | 1.5 | 9.55 | 360 | 2.7 | 1300 | 8000 | 0.0081 |
| KE-36D48-182.2 | S1 | 2.2 | 3 | 11.7 | 380 | 4.28 | 1800 | 8000 | 0.0117 |
| NE-30D46-162.2 | S6 | 2.6 | 3 | 13.8 | 360 | 5 | 1800 | 8000 | 0.0117 |
| KE-36D48-131.5 | S1 | 1.5 | 2.2 | 11.0 | 380 | 2.9 | 1300 | 6000 | 0.011 |
| NE-30D46-131.3 | S6 | 1.85 | 2.2 | 13.6 | 380 | 3.68 | 1300 | 0000 | 0.011 |

Motorized spindle K E - 3 8 D 4 8

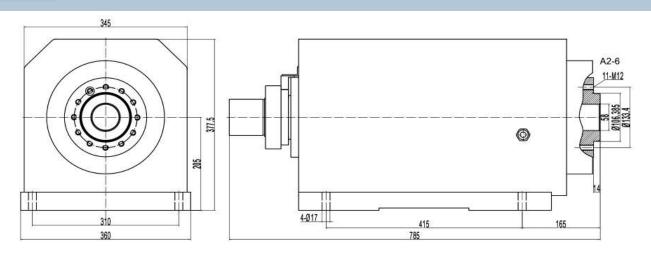


| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| WE 20040 102 | S1 | 3 | 4 | 15.9 | 200 | 5.6 | 1000 | 6000 | 0.0150 |
| KE-38D48-183 | S6 | 3.5 | 4 | 18.6 | 380 | 6.67 | 1800 | 6000 | 0.0159 |
| KE-38D48-132.2 | S1 | 2.2 | 3 | 16.2 | 380 | 4.44 | 1300 | 5000 | 0.0162 |
| NE-30040-132.2 | S6 | 2.6 | 3 | 19.1 | 300 | 5.1 | 1300 | 3000 | 0.0162 |
| KE-38D48-184 | S1 | 4 | 5.5 | 21.2 | 380 | 7.6 | 1800 | 6000 | 0.0212 |
| NL-30D40-104 | S6 | 4.75 | 5.5 | 25.2 | 360 | 8.9 | 1800 | 0000 | 0.0212 |
| KE-38D48-133 | S1 | 3 | 4 | 22.0 | 380 | 5.9 | 1300 | 5000 | 0.022 |
| VF-20040-122 | S6 | 3.5 | 4 | 25.7 | 360 | 6.8 | 1300 | 3000 | 0.022 |

Motorized spindle KE-38D52

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| WE 20DE2 102 | S1 | 3 | 4 | 15.9 | 200 | 5.6 | 1000 | 6000 | 0.0150 |
| KE-38D52-183 | S6 | 3.5 | 4 | 18.6 | 380 | 6.67 | 1800 | 6000 | 0.0159 |
| KE-38D52-132.2 | S1 | 2.2 | 3 | 16.2 | 380 | 4.44 | 1300 | 5000 | 0.0162 |
| NE-38D32-132.2 | S6 | 2.6 | 3 | 19.1 | 380 | 5.1 | 1300 | 3000 | 0.0162 |
| KE-38D52-184 | S1 | 4 | 5.5 | 21.2 | 380 | 7.6 | 1800 | 6000 | 0.0212 |
| KE-30D32-104 | S6 | 4.75 | 5.5 | 25.2 | 300 | 8.9 | 1800 | 0000 | 0.0212 |
| KE 30D52 133 | S1 | 3 | 4 | 22.0 | 380 | 5.9 | 1300 | 5000 | 0.022 |
| KE-38D52-133 S6 | 3.5 | 4 | 25.7 | 380 | 6.8 | 1300 | 5000 | 0.022 | |

Motorized spindle KE-40D58



| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| VE 41 DE0 155 5 | S1 | 5.5 | 7.5 | 35.0 | 200 | 10.3 | 1500 | 5000 | 0.025 |
| KE-41D58-155.5 | S6 | 6.5 | 7.5 | 41.4 | 380 | 12 | 1500 | 5000 | 0.035 |
| KE-41D58-104 | S1 | 4 | 5.5 | 38.2 | 380 | 7.73 | 1000 | 4000 | 0.038 |
| KE-41D36-104 | S6 | 4.75 | 5.5 | 45.4 | 300 | 9.1 | 1000 | 4000 | 0.038 |
| KE-41D58-157.5 | S1 | 7.5 | 11 | 47.8 | 380 | 13.75 | 1500 | 5000 | 0.048 |
| NE-41D36-137.3 | S6 | 9.25 | 11 | 58.9 | 300 | 16.7 | 1300 | 3000 | 0.048 |
| KE-41D58-105.5 | S1 | 5.5 | 7.5 | 52.5 | 380 | 10.36 | 1300 | 4000 | 0.053 |
| NL-41D30-103.3 | S6 | 6.5 | 1.3 | 62.1 | 360 | 12.1 | 1300 | 4000 | 0.055 |

| Motorized spindle | KE-40D63 | į |
|-------------------|----------|---|
| motorized opinals | NE-TUDU. | 2 |

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) |
|--|--------------|------------------------|----------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|
| VE 41D02 1EE E | S1 | 5.5 | 7.5 | 35.0 | 200 | 10.3 | 1500 | 5000 | 0.025 |
| KE-41D63-155.5 | S6 | 6.5 | 7.5 | 41.4 | 380 | 12 | 1500 | 5000 | 0.035 |
| KE-41D63-104 | S1 | 4 | 5.5 | 38.2 | 380 | 7.73 | 1000 | 4000 | 0.038 |
| KE-41D03-104 | S6 | 4.75 | 5.5 | 45.4 | 360 | 9.1 | 1000 | 4000 | 0.038 |
| KE-41D63-157.5 | S1 | 7.5 | 11 | 47.8 | 380 | 13.75 | 1500 | 5000 | 0.048 |
| KE-41D03-137.3 | S6 | 9.25 | 11 | 58.9 | 360 | 16.7 | 1300 | 3000 | 0.048 |
| KE-41D63-105.5 | S1 | 5.5 | 7.5 | 52.5 | 380 | 10.36 | 1300 | 4000 | 0.053 |
| NE-41D05-105.5 | S6 | 6.5 | 1.5 | 62.1 | 380 | 12.1 | 1300 | 4000 | 0.055 |

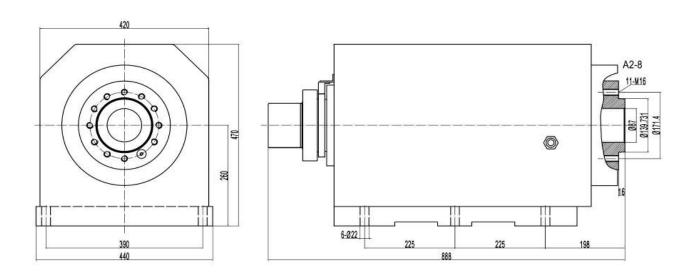
| Motorized spindle | K | 1 | \cap | \mathbf{n} | 7 | 2 |
|--------------------|---|---|--------|--------------|---|---|
| Motorized Spillale | | | | | | |

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) | |
|--|--------------|------------------------|----------------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|--|
| VE 41072 1511 | S1 | 11 | 1.5 | 70.0 | 200 | 21.1 | 1500 | 4000 | 0.07 | |
| KE-41D73-1511 | S6 | 13 | 15 | 82.8 | 380 | 24.3 | 1500 | 4000 | 0.07 | |
| KE-41D73-107.5 | S1 | 7.5 | 11 | 71.6 | 380 | 14.7 | 1000 | 3500 | 0.072 | |
| NE-41D13-101.3 | S6 | 9.25 | 11 | 88.3 | 300 | 17.6 | 1000 | 3300 | 0.072 | |
| KE 41D72 7005 5 | S1 | 5.5 | 7.5 | 75.0 | 380 | 11.2 | 700 | 3000 | 0.075 | |
| KE-41D73-7005.5 | S6 | 6.5 | 1.5 | 88.7 | 360 | 12.9 | 700 | 3000 | 0.075 | |

Motorized spindle K E - 5

| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg · m²) | |
|--|--------------|------------------------|-----------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-------------------------------|--|
| VE E2D72 1E11 | S1 | 11 | 15 | 70.0 | 200 | 21.1 | 1500 | 4000 | 0.07 | |
| KE-52D73-1511 | S6 | 13 | 15 | 82.8 | 380 | 24.3 | 1500 | 4000 | 0.07 | |
| KE-52D73-107.5 | S1 | 7.5 | 11 | 71.6 | 380 | 14.7 | 1000 | 3500 | 0.072 | |
| NE-32D13-101.3 | S6 | 9.25 | 11 | 88.3 | 360 | 17.6 | 1000 | 3500 | 0.072 | |
| KE-52D73-7005.5 | S1 | 5.5 | 7.5 75.0 380 11.2 700 | | 700 | 3000 | 0.075 | | | |
| NE-32D13-1005.5 | S6 | 6.5 | 1.5 | 88.7 | 380 | 12.9 | 700 | 3000 | 0.075 | |

Motorized spindle KE-52D87



| Box-type Motorized spindle Model | Duty type | Rated power (kw) | Drive capacity (kVA) | Rated torque (Nm) | Rated voltage (V) | Rated current (A) | Base rotation speed (r/min) | Maximum speed (r/min) | Motor inertia (kg·m²) | |
|--|--------------|------------------------|----------------------------|-------------------------|-------------------------|-------------------------|--------------------------------------|-----------------------------|-----------------------------|--|
| KE-52D87-1515 | S1 | 15 | 18.5 | 95.5 | 380 | 28.1 | 1500 | 4000 | 0.096 | |
| NE-32001-1313 | S6 | 16.75 | 10.5 | 106.6 | 360 | 31 | 1500 | 4000 | 0.030 | |
| KE-52D87-1011 | S1 | 11 | 15 | 105.1 | 380 | 21 | 1000 | 3500 | 0.105 | |
| NL-32D01-1011 | S6 | 13 | 15 | 124.2 | 360 | 24.2 | 1000 | 3300 | 0.103 | |
| KE-52D87-7007.5 | S1 | 7.5 | 11 | 102.3 | 380 | 14.9 | 700 | 3500 | 0.102 | |
| NL-32D81-1001.3 | S6 | 9.25 | 11 | 126.2 | 360 | 17.8 | 700 | 3300 | 0.102 | |
| KE-52D87-1518.5 | S1 | 18.5 | 22 | 117.8 | 380 | 34.3 | 1500 | 4000 | 0.118 | |
| NL-32D01-1316.3 | S6 | 20.25 | 22 | 128.9 | 360 | 37 | 1300 | 4000 | 0.110 | |
| KE-52D87-1015 | S1 | 15 | 18.5 | 143.3 | 380 | 28.1 | 1000 | 3500 | 0.143 | |
| NE-32D87-1013 | S6 | 16.75 | 16.5 | 160.0 | 380 | 31 | 1000 | 3500 | 0.143 | |
| KE-52D87-0711 | S1 | 11 | 15 | 150.1 | 380 | 21 | 700 | 3000 | 0.15 | |
| NE-32D87-0711 | S6 | 13 | 13 | 177.4 | 360 | 26.7 | 700 | 3000 | 0.15 | |
| KE-52D87-1522 | S1 | 22 | 30 | 140.1 | 380 | 40.6 | 1500 | 4000 | 0.14 | |
| NE-32D67-1322 | S6 | 26 | 30 | 165.5 | 360 | 47 | 1300 | 4000 | 0.14 | |
| KE-52D87-1018.5 | S1 | 18.5 | 22 | 176.7 | 380 | 34.4 | 1000 | 3500 | 0.177 | |
| NE-3ZD01-1018.5 | S6 | 20.25 | 22 | 193.4 | 360 | 37.2 | 1000 | 3300 | 0.177 | |
| KE-52D87-7515 | S1 | 15 | 18.5 | 191.0 | 380 | 28.4 | 750 | 3000 | 0.191 | |
| NL-32001-1313 | S6 | 16.75 | 10.5 | 213.3 | 300 | 31.3 | 150 | 3000 | 0.131 | |

KZG series High-speed CNC Servo Spindle Motors

Product characteristics

Heavy cutting in low speed zone, small vibration and high precision in high speed zone, fast dynamic response, only takes 1.9 seconds from 0 to 20000rpm

- Optimized winding design and high efficiency cooling structure, motor have strong and agile acceleration ability and wide range speed regulation ability in high speed zone.
- Good control performance, fast response, accurate zero-speed position and high accuracy of indexing control
- Optimized mechanical design, high mechanical accuracy and low vibration, direct connection with the spindle
- Built-in encoder, no need additional C-axis encoder
- \bigcirc High-precision: radial<0.005 axial<0.01
- High efficiency: higher than IE3 of IEC60034-30 and level 2 energy efficiency of GB18613-2012



High-end vertical processing center, horizontal processing center, compound high precision processing center







Vertical processing center

Drilling milling center

Compound high precision processing center

Model description

KZG series High-speed CNC Servo Spindle Motors

$$\frac{K}{1} \frac{ZG}{2} - \frac{150}{3} - \frac{200}{4} \frac{3.7}{5} - \frac{\Box}{6}$$

| No. | Name | Description |
|-----|------|-----------------------------------|
| 1 | К | main mode name |
| 2 | ZG | servo spindle motor(high-speed) |
| 3 | 150 | flange fitting diameter : 150mm |
| 4 | 200 | Maximum rotation speed 200×100rpm |
| 5 | 3.7 | rated power : 3.7kw |
| 6 | | encoder |

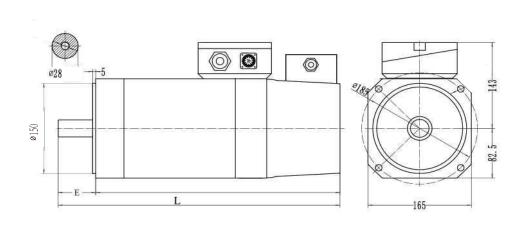
High-speed Spindle Motors

K Z G - 1 1 (

| Model | Rated power | Maximum power | Voltage | Rated rotation speed | Rated torque | Maximum rotation speed | Motor inertia |
|----------------|--------------------|--------------------|-------------|----------------------------|-----------------|------------------------------|------------------|
| Wodel | kW (continuous) | kW (30 minutes) | V | r/min | Nm | r/min | Kg.m2 |
| KZG-110-2402.2 | 2.2 | 3.7 | 200、220、380 | 6000 | 3.50 | 24000 | 0.0032 |
| KZG-110-2001.5 | 1.5 | 2.2 | 200、220、380 | 3000 | 4.78 | 20000 | 0.0043 |

High-speed Spindle Motors

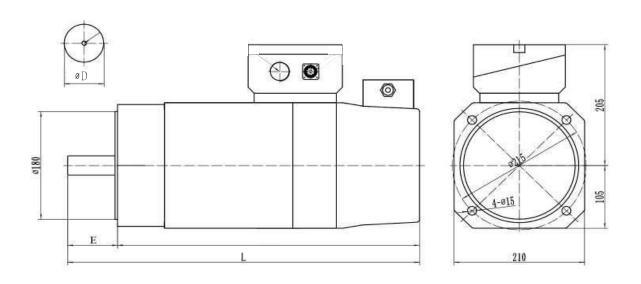
KZG-150



| Model | Rated power | Maximum power | Voltage | Rated rotation speed | Rated torque | Maximum rotation speed | Motor inertia |
|----------------|--------------------|-------------------|-------------|----------------------|-----------------|------------------------------|------------------|
| Model | kW (continuous) | kW (30 minutes |) V | r/min | Nm | r/min | Kg.m2 |
| KZG-150-2002.2 | 2.2 | 3.7 | 200、220、380 | 3000 | 7.00 | 20000 | 0.008 |
| KZG-150-2003.7 | 3.7 | 5.5 | 200、220、380 | 3000 | 11.78 | 20000 | 0.01 |

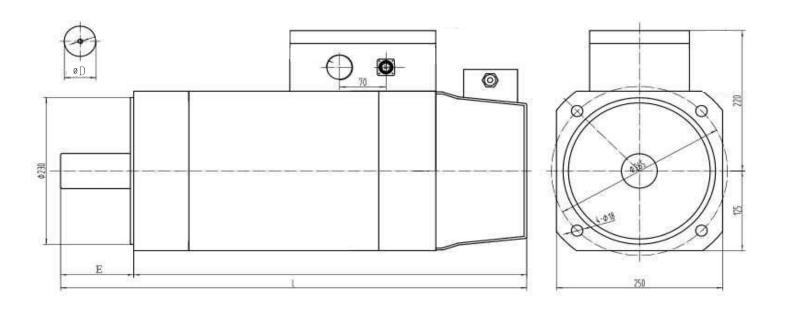
High-speed Spindle Motors

KZG-180



| Model | Rated power | Maximum power | Voltage | Rated rotation speed | Rated torque | Maximum rotation speed | Motor inertia |
|----------------|--------------------|-------------------|-------------|----------------------------|-----------------|------------------------------|------------------|
| Wodei | kW (continuous) | kW (30 minutes |) V | r/min | Nm | r/min | Kg.m2 |
| KZG-180-1205.5 | 5.5 | 7.5 | 200、220、380 | 2000 | 26.26 | 12000 | 0.019 |
| KZG-180-1207.5 | 7.5 | 11 | 200、220、380 | 2000 | 35.81 | 12000 | 0.028 |
| KZG-180-1505.5 | 5.5 | 7.5 | 200、220、380 | 3000 | 17.51 | 15000 | 0.019 |
| KZG-180-1507.5 | 7.5 | 11 | 200、220、380 | 3000 | 23.88 | 15000 | 0.028 |

KZG-230



| Model | Rated power | Maximum power | Voltage | Rated rotation speed | Rated torque | Maximum rotation speed | Motor inertia |
|-----------------|-------------|---------------------|---------|----------------------------|-----------------|------------------------------|------------------|
| kW | | kW) (30 minutes | v V | r/min | Nm | r/min | Kg.m2 |
| KZG-230-12015 | 15 | 18.5 | 380 | 2000 | 71.63 | 12000 | 0.092 |
| KZG-230-12018.5 | 18.5 | 22 | 380 | 2000 | 88.34 | 12000 | 0.116 |
| KZG-230-12022 | 22 | 26 | 380 | 2000 | 105.05 | 12000 | 0.13 |
| KZD-230-15015 | 15 | 18.5 | 380 | 3000 | 47.75 | 12000 | 0.061 |
| KZG-230-15018.5 | 18.5 | 22 | 380 | 3000 | 58.89 | 12000 | 0.092 |
| KZG-230-15022 | 22 | 26 | 380 | 3000 | 70.03 | 12000 | 0.116 |

KZ series **CNC** Servo Spindle Motors

Product characteristics

Compact structure, superior performance and efficient, widely used in various fields of mechanical manufacturing. Optimized winding design and high efficiency cooling structure, motor have strong and agile acceleration ability and wide range speed regulation ability in high speed zone.

- O Low motor inertia and fast dynamic response
- Built-in encoder, no need additional C-axis encoder
- Motor installed with independent fan, forced air cooling
- Low noise, low vibration
- Large torque, high dynamic performance (short rise time of slope)
- High efficiency: higher than IE3 of IEC60034-30 and level 2 energy efficiency of GB18613-2012



Applications

Machine tools, plastic processing equipment, paper machinery, printing machinery, textile machinery, wood, glass, ceramics and stone processing machinery, packaging machinery, servo press, wire drawing machine, cable winding machine, lifting equipment or crane, test bench, user-designed special machine, seamless steel tube hot continuous rolling system, aluminum foil mill, circular knitting machine, bending hoop machine, automatic pipe cutting machine, metal circle sawing machine, hydraulic press, cleaning machine, rotary cutting machine, automatic shelf (for large e-commerce companies), etc.







CNC lathe

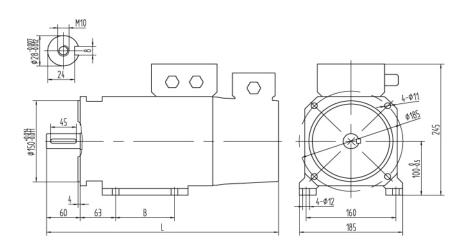
Vertical lathe

Veneer lath

Model description KZ series CNC Servo Spindle Motors

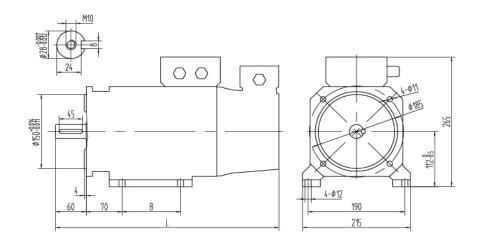
$$\frac{K}{1} \frac{Z}{2} - \frac{165}{3} - \frac{15}{4} \frac{2.2}{5} - \frac{\Box \Box}{6} - \frac{B5}{7}$$

| No. | Name | Description |
|-----|------|----------------------------|
| 1 | К | main mode name |
| 2 | Z | servo spindle motor |
| 3 | 165 | Motor width |
| 4 | 15 | rated speed 15×100rpm |
| 5 | 2.2 | rated power : 2.2kw |
| 6 | B5 | mounting type: B5, B3, B35 |
| 7 | | encoder |



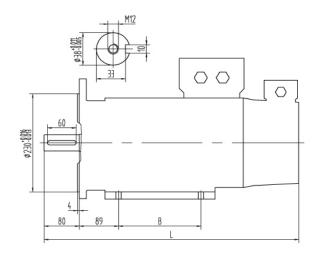
| | | Constant power | Rotation | Si | ze | | | | |
|---------------|-------|----------------|----------|---------|-------|------------------------|---------|----|-----|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | N·m | V | А | r/min | r/min | kg·m2 | mm | mm |
| KZ-165-100.75 | 0.75 | 7.16 | 380 | 1.75 | 1000 | 2500 | 0.0041 | 50 | 360 |
| KZ-165-151.1 | 1.1 | 7 | 380 | 2.35 | 1500 | 3750 | 0.0041 | 50 | 360 |
| KZ-165-201.5 | 1.5 | 7.16 | 380 | 3.08 | 2000 | 5000 | 0.0041 | 50 | 360 |
| KZ-165-302.2 | 2.2 | 7 | 380 | 4.3 | 3000 | 7500 | 0.0041 | 50 | 360 |

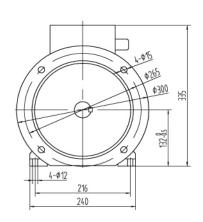
| | | Rated | | | | | | Size | |
|--------------|-------|-------------|---------|---------|-------|------------------------|---------|------|-----|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | $N \cdot m$ | V | А | r/min | r/min | kg·m2 | mm | mm |
| KZ-165-101.1 | 1.1 | 10.5 | 380 | 2.45 | 1000 | 2500 | 0.005 | 70 | 380 |
| KZ-165-151.5 | 1.5 | 9.55 | 380 | 3.1 | 1500 | 3750 | 0.005 | 70 | 380 |
| KZ-165-202.2 | 2.2 | 10.5 | 380 | 4.39 | 2000 | 5000 | 0.005 | 70 | 380 |
| KZ-165-303 | 3 | 9.55 | 380 | 5.75 | 3000 | 7500 | 0.005 | 70 | 380 |
| KZ-165-303.7 | 3.7 | 11.8 | 380 | 7 | 3000 | 7500 | 0.005 | 70 | 380 |
| KZ-165-101.5 | 1.5 | 14.3 | 380 | 3.25 | 1000 | 2500 | 0.0067 | 105 | 415 |
| KZ-165-152.2 | 2.2 | 14 | 380 | 4.45 | 1500 | 3750 | 0.0067 | 105 | 415 |
| KZ-165-203 | 3 | 14.3 | 380 | 5.86 | 2000 | 5000 | 0.0067 | 105 | 415 |
| KZ-165-203.7 | 3.7 | 17.7 | 380 | 7.15 | 2000 | 5000 | 0.0067 | 105 | 415 |
| KZ-165-304 | 4 | 12.7 | 380 | 7.6 | 3000 | 7500 | 0.0067 | 105 | 415 |
| KZ-165-102.2 | 2.2 | 21 | 380 | 4.65 | 1000 | 2500 | 0.0089 | 150 | 460 |
| KZ-165-153 | 3 | 19.1 | 380 | 6 | 1500 | 3750 | 0.0089 | 150 | 460 |
| KZ-165-153.7 | 3.7 | 23.6 | 380 | 7.35 | 1500 | 3750 | 0.0089 | 150 | 460 |
| KZ-165-204 | 4 | 19.1 | 380 | 7.7 | 2000 | 5000 | 0.0089 | 150 | 460 |
| KZ-165-305.5 | 5.5 | 17.5 | 380 | 10.3 | 3000 | 7500 | 0.0089 | 150 | 460 |

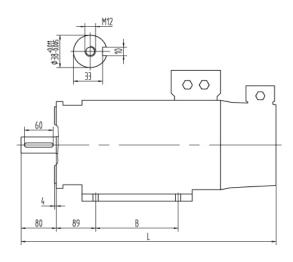


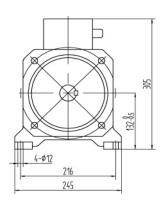
| Model | | Constant power | Rotation | Si | ze | | | | |
|--------------|-------|----------------|----------|---------|-------|------------------------|---------|----|-----|
| | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | N·m | V | А | r/min | r/min | kg·m2 | mm | mm |
| KZ-180-101.5 | 1.5 | 14.3 | 380 | 3.25 | 1000 | 2500 | 0.0069 | 75 | 400 |
| KZ-180-152.2 | 2.2 | 14 | 380 | 4.49 | 1500 | 3750 | 0.0069 | 75 | 400 |

| Model | | | Rated | Constant power | Rotation | Size | | | |
|--------------|-------|--------|---------|----------------|----------|------------------------|---------|-----|-----|
| | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | Ν·m | V | А | r/min | r/min | kg · m2 | mm | mm |
| KZ-180-203 | 3 | 14.3 | 380 | 5.97 | 2000 | 5000 | 0.0069 | 75 | 400 |
| KZ-180-203.7 | 3.7 | 17.7 | 380 | 7.21 | 2000 | 5000 | 0.0069 | 75 | 400 |
| KZ-180-254 | 4 | 15.3 | 380 | 7.72 | 2500 | 6500 | 0.0069 | 75 | 400 |
| KZ-180-102.2 | 2.2 | 21 | 380 | 4.61 | 1000 | 2500 | 0.0094 | 115 | 440 |
| KZ-180-153 | 3 | 19.1 | 380 | 6.11 | 1500 | 3750 | 0.0094 | 115 | 440 |
| KZ-180-153.7 | 3.7 | 23.6 | 380 | 7.32 | 1500 | 3750 | 0.0094 | 115 | 440 |
| KZ-180-204 | 4 | 19.1 | 380 | 7.87 | 2000 | 5000 | 0.0094 | 115 | 440 |
| KZ-180-255.5 | 5.5 | 21 | 380 | 10.6 | 2500 | 6500 | 0.0094 | 115 | 440 |
| KZ-180-103 | 3 | 28.7 | 380 | 6.16 | 1000 | 2500 | 0.0109 | 140 | 465 |
| KZ-180-103.7 | 3.7 | 35.3 | 380 | 7.67 | 1000 | 2500 | 0.0109 | 140 | 465 |
| KZ-180-154 | 4 | 25.5 | 380 | 7.87 | 1500 | 3750 | 0.0109 | 140 | 465 |
| KZ-180-205.5 | 5.5 | 26.3 | 380 | 10.6 | 2000 | 5000 | 0.0109 | 140 | 465 |
| KZ-180-257.5 | 7.5 | 28.7 | 380 | 14.1 | 2500 | 6500 | 0.0109 | 140 | 465 |
| KZ-180-104 | 4 | 38.2 | 380 | 8.21 | 1000 | 2500 | 0.0127 | 170 | 495 |
| KZ-180-155.5 | 5.5 | 35 | 380 | 10.7 | 1500 | 3750 | 0.0127 | 170 | 495 |
| KZ-180-207.5 | 7.5 | 35.8 | 380 | 14.1 | 2000 | 5000 | 0.0127 | 170 | 495 |
| KZ-180-309.5 | 9.5 | 36.3 | 380 | 17.6 | 2500 | 6500 | 0.0127 | 170 | 495 |

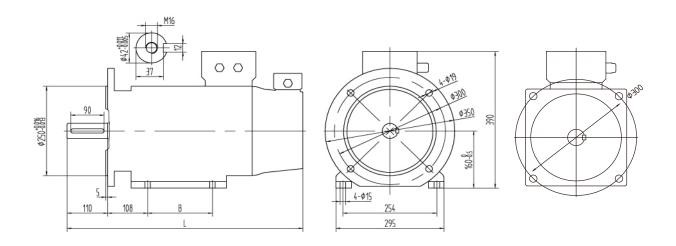






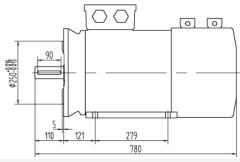


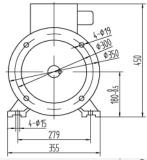
| | | | Rated | Constant | Rotation | Size | | | |
|----------------|-------|--------|---------|----------|----------|------------------------|---------|-----|-----|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | Ν·m | V | А | r/min | r/min | kg⋅m2 | mm | mm |
| KZ-210-7502.2 | 2.2 | 28 | 380 | 4.83 | 750 | 2000 | 0.0144 | 70 | 463 |
| KZ-210-103 | 3 | 28.7 | 380 | 6.22 | 1000 | 2500 | 0.0144 | 70 | 463 |
| KZ-210-103.7 | 3.7 | 35.3 | 380 | 7.72 | 1000 | 2500 | 0.0144 | 70 | 463 |
| KZ-210-154 | 4 | 25.5 | 380 | 7.88 | 1500 | 3750 | 0.0144 | 70 | 463 |
| KZ-210-205.5 | 5.5 | 26.3 | 380 | 10.6 | 2000 | 5000 | 0.0144 | 70 | 463 |
| KZ-210-7503 | 3 | 38.2 | 380 | 6.38 | 750 | 2000 | 0.0197 | 115 | 508 |
| KZ-210-7503.7 | 3.7 | 47.1 | 380 | 7.98 | 750 | 2000 | 0.0197 | 115 | 508 |
| KZ-210-104 | 4 | 38.2 | 380 | 8.13 | 1000 | 2500 | 0.0197 | 115 | 508 |
| KZ-210-155.5 | 5.5 | 35 | 380 | 10.8 | 1500 | 3750 | 0.0197 | 115 | 508 |
| KZ-210-207.5 | 7.5 | 35.8 | 380 | 14.2 | 2000 | 5000 | 0.0197 | 115 | 508 |
| KZ-210-7504 | 4 | 50.9 | 380 | 8.4 | 750 | 2000 | 0.0244 | 155 | 548 |
| KZ-210-105.5 | 5.5 | 52.5 | 380 | 11 | 1000 | 2500 | 0.0244 | 155 | 548 |
| KZ-210-157.5 | 7.5 | 47.8 | 380 | 14.3 | 1500 | 3750 | 0.0244 | 155 | 548 |
| KZ-210-2011 | 11 | 52.5 | 380 | 20.4 | 2000 | 5000 | 0.0244 | 155 | 548 |
| KZ-210-7504.75 | 4.75 | 60.5 | 380 | 9.93 | 750 | 2000 | 0.0279 | 185 | 578 |
| KZ-210-106.5 | 6.5 | 62.1 | 380 | 12.9 | 1000 | 2500 | 0.0279 | 185 | 578 |
| KZ-210-159.5 | 9.5 | 60.5 | 380 | 17.8 | 1500 | 3750 | 0.0279 | 185 | 578 |
| KZ-210-2013 | 13 | 62.1 | 380 | 24.1 | 2000 | 5000 | 0.0279 | 185 | 578 |
| KZ-210-7505.5 | 5.5 | 70 | 380 | 11.4 | 750 | 2000 | 0.0308 | 210 | 603 |
| KZ-210-107.5 | 7.5 | 71.6 | 380 | 14.8 | 1000 | 2500 | 0.0308 | 210 | 603 |
| KZ-210-1511 | 11 | 70 | 380 | 20.6 | 1500 | 3750 | 0.0308 | 210 | 603 |
| KZ-210-2015 | 15 | 71.6 | 380 | 27.6 | 2000 | 5000 | 0.0308 | 210 | 603 |



| | | ı | Rated | Constant power | Rotation | Size | | | |
|----------------|-------|--------|---------|----------------|----------|------------------------|---------|-----|-----|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia | В | L |
| | kW | Ν·m | V | А | r/min | r/min | kg·m2 | mm | mm |
| KZ-250-7504 | 4 | 50.9 | 380 | 8.33 | 750 | 2000 | 0.0392 | 95 | 560 |
| KZ-250-105.5 | 5.5 | 52.5 | 380 | 10.9 | 1000 | 2500 | 0.0392 | 95 | 560 |
| KZ-250-157.5 | 7.5 | 47.8 | 380 | 14.4 | 1500 | 3750 | 0.0392 | 95 | 560 |
| KZ-250-2011 | 11 | 52.5 | 380 | 20.3 | 2000 | 5000 | 0.0392 | 95 | 560 |
| KZ-250-7504.75 | 4.75 | 60.5 | 380 | 9.74 | 750 | 2000 | 0.044 | 115 | 580 |
| KZ-250-106.5 | 6.5 | 62.1 | 380 | 12.8 | 1000 | 2500 | 0.044 | 115 | 580 |
| KZ-250-159.5 | 9.5 | 60.5 | 380 | 17.8 | 1500 | 3750 | 0.044 | 115 | 580 |
| KZ-250-2013 | 13 | 62.1 | 380 | 23.8 | 2000 | 5000 | 0.044 | 115 | 580 |
| KZ-250-7505.5 | 5.5 | 70 | 380 | 11.2 | 750 | 2000 | 0.05 | 140 | 605 |
| KZ-250-107.5 | 7.5 | 71.6 | 380 | 14.6 | 1000 | 2500 | 0.05 | 140 | 605 |
| KZ-250-1511 | 11 | 70 | 380 | 20.6 | 1500 | 3750 | 0.05 | 140 | 605 |
| KZ-250-2015 | 15 | 71.6 | 380 | 27.5 | 2000 | 5000 | 0.05 | 140 | 605 |
| KZ-250-7507.5 | 7.5 | 95.5 | 380 | 15 | 750 | 2000 | 0.0583 | 175 | 640 |
| KZ-250-1011 | 11 | 105.1 | 380 | 21.1 | 1000 | 2500 | 0.0583 | 175 | 640 |
| KZ-250-1515 | 15 | 95.5 | 380 | 27.8 | 1500 | 3750 | 0.0583 | 175 | 640 |
| KZ-250-2018.5 | 18.5 | 88.3 | 380 | 33.6 | 2000 | 5000 | 0.0583 | 175 | 640 |
| KZ-250-7511 | 11 | 140.1 | 380 | 21.9 | 750 | 2000 | 0.0691 | 220 | 685 |
| KZ-250-1015 | 15 | 143.3 | 380 | 28.7 | 1000 | 2500 | 0.0691 | 220 | 685 |
| KZ-250-1518.5 | 18.5 | 117.8 | 380 | 34 | 1500 | 3750 | 0.0691 | 220 | 685 |
| KZ-250-2022 | 22 | 105.1 | 380 | 40 | 2000 | 5000 | 0.0691 | 220 | 685 |

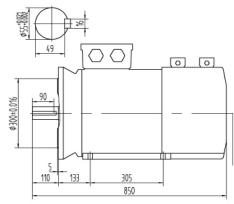


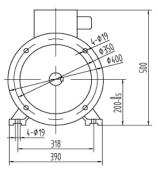




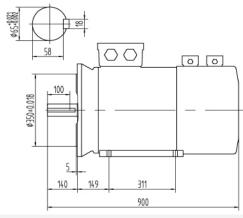
| | | | Constant power | Rotation | | | |
|---------------|-------|--------|----------------|----------|-------|------------------------|---------|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia |
| | kW | N·m | V | А | r/min | r/min | kg⋅m2 |
| KZ-300-1018.5 | 18.5 | 176.7 | 380 | 36.6 | 1000 | 2500 | 0.2803 |
| KZ-300-60011 | 11 | 175.1 | 380 | 23.2 | 600 | 1500 | 0.2803 |
| KZ-300-5009.5 | 9.5 | 181.5 | 380 | 20.5 | 500 | 1250 | 0.2803 |

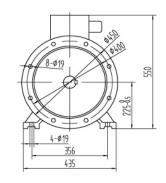
Spindle Motors K Z - 3 5 0



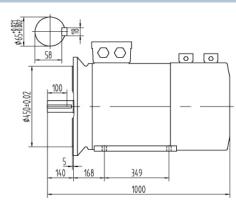


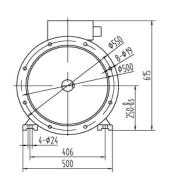
| | | | Constant | Rotation | | | |
|----------------|-------|--------|----------|----------|-------|---------------------------|---------|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia |
| | kW | N·m | V | А | r/min | r/min | kg⋅m2 |
| KZ-350-1030 | 30 | 286.5 | 380 | 58.5 | 1000 | 2500 | 0.4617 |
| KZ-350-60018.5 | 18.5 | 294.5 | 380 | 38 | 600 | 1500 | 0.4617 |
| KZ-350-50015 | 15 | 286.5 | 380 | 31.9 | 500 | 1250 | 0.4617 |
| KZ-350-1022 | 22 | 210.1 | 380 | 43.5 | 1000 | 2500 | 0.395 |
| KZ-350-60015 | 15 | 238.8 | 380 | 31.3 | 600 | 1500 | 0.395 |
| KZ-350-50011 | 11 | 210.1 | 380 | 23.5 | 500 | 1250 | 0.395 |





| | | | Constant | Rotation | | | |
|----------------|-------|--------|----------|----------|-------|---------------------------|---------|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia |
| | kW | N·m | V | А | r/min | r/min | kg·m2 |
| KZ-400-75037 | 37 | 471.1 | 380 | 75.2 | 750 | 2000 | 0.7995 |
| KZ-400-45022 | 22 | 466.9 | 380 | 47.2 | 450 | 1200 | 0.7995 |
| KZ-400-37518.5 | 18.5 | 471.1 | 380 | 40.8 | 375 | 950 | 0.7995 |
| KZ-400-75030 | 30 | 382 | 380 | 61.6 | 750 | 2000 | 0.7062 |
| KZ-400-45018.5 | 18.5 | 392.6 | 380 | 40 | 450 | 1200 | 0.7062 |
| KZ-400-37515 | 15 | 382 | 380 | 33.3 | 375 | 9550 | 0.7062 |





| | | | Constant power | Rotation | | | |
|--------------|-------|--------|----------------|----------|-------|------------------------|---------|
| Model | Power | Torque | Voltage | Current | Speed | Maximum rotation speed | inertia |
| | kW | N·m | V | А | r/min | r/min | kg·m2 |
| KZ-500-75045 | 45 | 573 | 380 | 89 | 750 | 2000 | 1.144 |
| KZ-500-47530 | 30 | 603.2 | 380 | 62.5 | 475 | 1200 | 1.144 |
| KZ-500-37522 | 22 | 560.3 | 380 | 47 | 375 | 950 | 1.144 |

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