




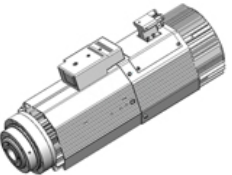




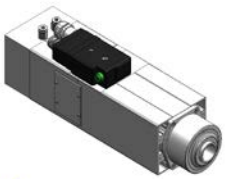



Automatic Tool Change Spindle Motors

| Motor | | TYPE OF SHAFT ISO 30 | | TYPE OF SHAFT HSK F63 | | Voltage | | Application | |
|---|--------------|---------------------------------------|--------------|--------------------------|--------------|---------|-----------|-------------|--|
| | | Short nose | Long nose | Short nose | Long nose | 380 V | 220/380 V | | |
|   | ES915 | 3.8kw 2 poles 24000rpm Air cooling | √ | √ | | | √ | √ | Plastic, wood, light aluminum |
| | | 5kw 4 poles 24000rpm Air cooling | √ | | | | √ | | Plastic, wood, light aluminum |
|   | ES929 | 5.5kw 4 poles 20000rpm Air cooling | √ | | √ | | √ | | Plastic, wood, light aluminum, solid wood. |
| | | 7.5kw 4 poles 24000rpm Air cooling | √ | √ | √ | √ | √ | √ | Plastic, wood, light aluminum, solid wood. |
| | | 8 kw 4 poles 24000rpm Air cooling | | | | √ | | Only 220v | Plastic, wood, light aluminum, solid wood. |
| | | 10 kw 4 poles 24000rpm Air cooling | | √ | √ | √ | √ | | Plastic, wood, light aluminum, solid wood. |

| Motor | | TYPE OF SHAFT ISO 30 | | TYPE OF SHAFT HSK F63 | | Voltage | | Application |
|---|-------|--|--------------|--------------------------|--------------|---------|----------|--|
| | | Short nose | Long nose | Short nose | Long nose | 380 V | 220/380V | |
|  | ES929 | 12 kw 4 poles 24000rpm Liquid cooling | √ | √ | √ | √ | √ | Plastic, wood, light aluminum, solid wood. |
| | | 16 kw 4 poles 24000 rpm Liquid cooling | | | √ | √ | √ | |
|  | ES939 | 7.5 KW 4poles 24000 rpm Air Cooling & Encoder | √ | | | | √ | Aluminum, Light aluminum, Heavy aluminum |
| | | 9kw 4 poles 24000 rpm Liquid cooling | √ | | | | √ | |
|  | ES988 | 11KW 4 poles 24000 rpm Air Cooling | | | √ | √ | √ | Aluminum, Wood, Solid wood |
| | | 15kw 4 poles 24000 rpm Liquid Cooling | | | | √ | √ | |

| Motor | | TYPE OF SHAFT HSK- E25 | | Voltage | | Application | | |
|--|--------------|--|-----------|---------|----------|-------------|-----------|------------------|
| | | Short nose | Long nose | 380v | 220/380v | | | |
|  | ES325 | 2kw 2 poles 40000 or 50000rpm Liquid Cooling | √ | | | √ | | Light composites |
|  | ES326 | 4kw 2 poles 50000rpm Liquid Cooling | √ | | | √ | | Light composites |
|  | ES327 | 3kw 4 poles 40000 or 50000rpm Liquid Cooling | √ | | | √ | Only 220v | Light composites |

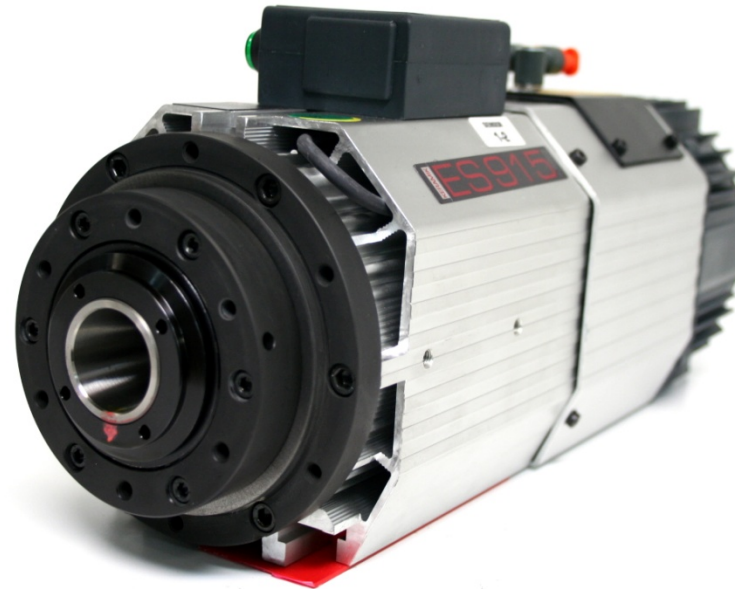
| Motor | | TYPE OF SHAFT ISO 30 | | TYPE OF SHAFT HSK-E40/F50 | | Voltage | | Application | |
|---|-------|---|-----------|------------------------------|-----------|---------|------|-------------|--------------------------------|
| | | Short nose | Long nose | Short nose | Long nose | 220v | 380v | | |
|  | ES330 | 4kw 4 poles 24000rpm Air cooling | √ | | | | | √ | Light Aluminum, Plastic, Wood. |
|  | ES350 | 6.5kw 4poles 36000rpm Liquid Cooling | | | √ | | | √ | Plastic, Aluminum |

Air cooled ATC Spindle motors

Automatic tool change spindle motors for machining wood, plastics, marble, glass, and aluminum. They are characterized by their extremely high reliability and the wide range of powers and operating speeds. They are available with type ISO30, HSK F50, HSK F63 tool holder fittings with powers ranging from 3.5kw up to 13.5kw and speeds up to 24000 rpm for all versions, The declared power ratings are guaranteed during continuous service, while the available powers for machining can be up 100% during discontinuous operations (for example when machining solid wood).

Liquid cooled ATC Spindle motors

Quick change liquid cooled spindle compatible with the air-cooled applications. Used for machining plastics, these motors are wide range of powers and operating from 2kw up to 22kw (speeds from



motors, with models mechanically versions, are designed for heavy duty steel, marble, wood, aluminum and characterized by reliability and by their speeds. They are available with powers 12000 rpm up to 50000 rpm).