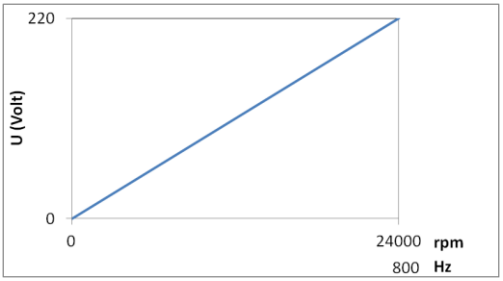
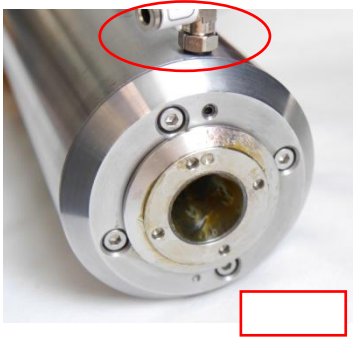
Technical Data:

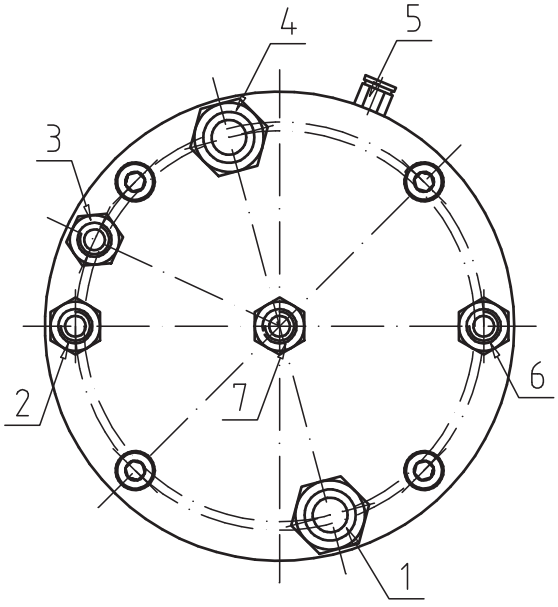
Power	2.2 kW
Change mechanics	pneumatic
Cooling	water-cooled
Collet	ISO 20
Balancing Class	G 2.5
Max. Speed	24000 rpm
Max. Frequency	800 Hz
Max. Current	7.6 A
Max. Voltage	220 V
Max. taper run out	3 µm
cooling flow	3-6 l/min
Weight	8 kg net.

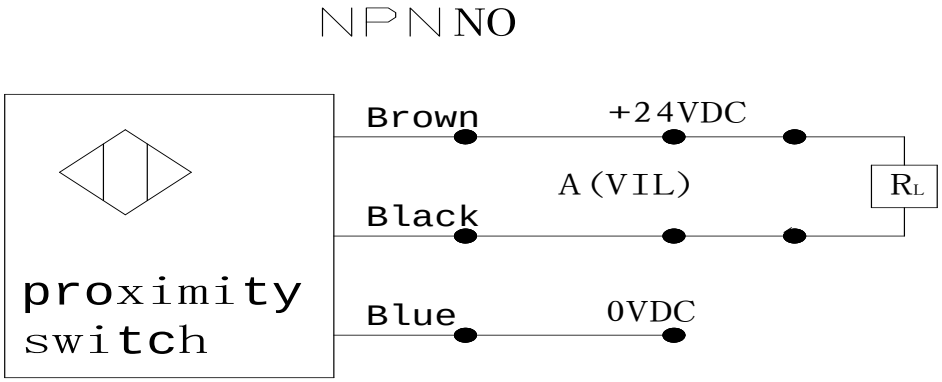


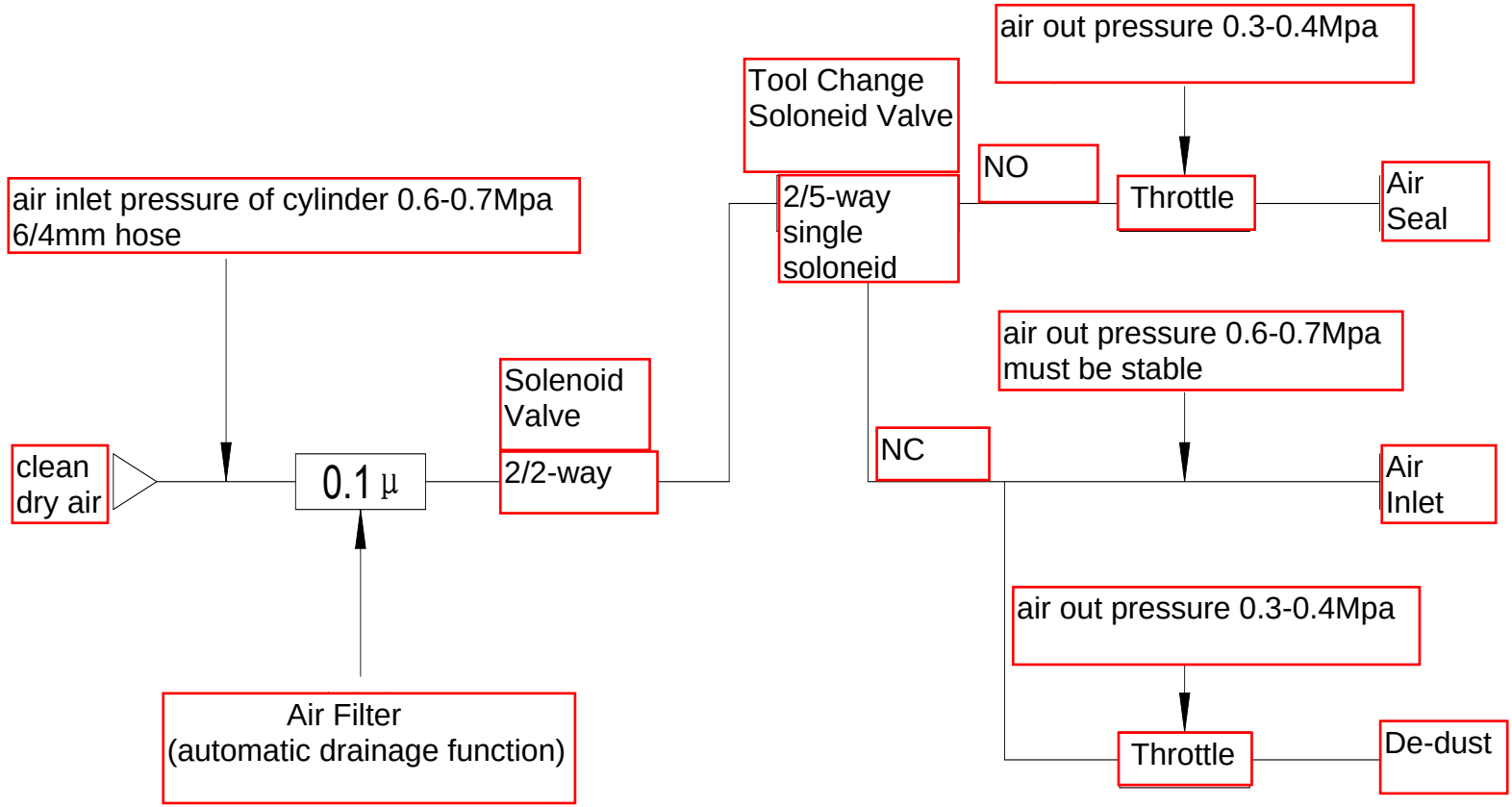


Connections:

1	U, V, W spindle connections	220 V, 7.6A, 800, Hz
1	110 °C safety temperature switch	2 wire connection (brown-brown)
1	Ground wire	yellow-green
2	Pump	Max. 0,8 Bar (8m pump head), 8/6mm tube
3	Dedusting	2-3 bar (0,2 – 0,3 MPa) 6/4 mm tube
4	Proximity Switches (2x)	NPN NO
5	Pneumatic Air Seal	1 – 2 bar (0,1-0,2 MPa)
6	Water outlet	8/6mm tube
7	Pneumatic Tool Change Inlet	6 – 7 bar (0,6-0,7 MPa) 6/4mm tube






air out pressure 0.3-0.4Mpa
Tool Change
Soloneid Valve
NO
Throttle
Air
Seal
air inlet pressure of cylinder 0.6-0.7Mpa
6/4mm hose
2/5-way
single
soloneid
air out pressure 0.6-0.7Mpa
must be stable
Solenoid
Valve
clean
dry air
0.1 μ
2/2-way
NC
Air
Inlet
air out pressure 0.3-0.4Mpa
Throttle
De-dust
Air Filter
(automatic drainage function)

Special warning:
1. The electric main shaft shall be installed at the clamped position; otherwise the bearing will be easily damaged!

2. The main shaft shall entirely stop before the tool changing. The manual tool changing button shall not act during the rotation of the shaft; otherwise it will easily result in the seizure of the shaft!

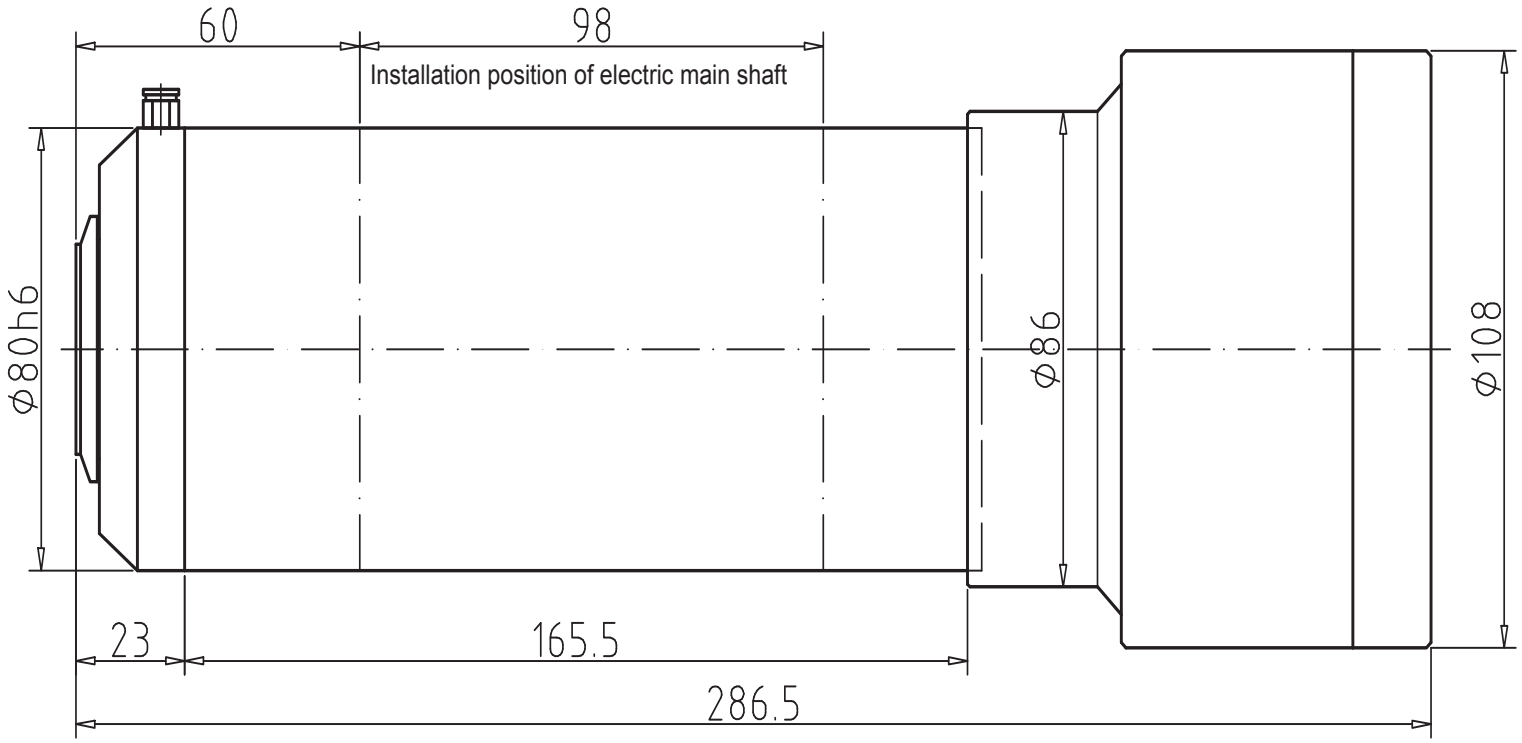
3. The compressed air shall be clean and dry, and the filter accuracy shall be 0.1micron! Air seal is normally open.
It is recommended to use the two-level filter, and the filter accuracy is 0.5 micron/ 0.1 micron respectively. The air filter is installed with the self-discharge device.

Tool Change Algorithm:

1. Keep the “Airseal” (5) always pressurized during normal operation.
2. Apply pressure to Tool Change Inlet (7) and Dedusting valve (3) to release the tool. Switch off air seal.
3. Remove the tool, check proximity switches.
4. Keep “Dedusting” and “Inlet” air flowing.
5. When the new tool is inserted into the taper, close the valve for “Tool Change Inlet” (7) and “Dedusting” (3). Open the “Air Seal” (5) again Please ensure that “Tool Change Inlet” (7) is connected to atmospheric pressure (open) to allow full pull back of the cylinder.

Please interlock the proximity switched for “tool change in progress” and “ tool proximity switch” to your control. Only allow the spindle to run, when the tool change was successful. Also interlock the temperature switch to prevent damage from overheating

Dimensions:



1	The electric spindle must be matched with the frequency converter. Frequency converter selection must be matched with the power, voltage, current, frequency and other parameters of the electric spindle. The use of electric spindle must first set the benchmark frequency of the inverter. The reference frequency of the frequency converter is set according to the highest frequency of the electric spindle. **Inverter reference frequency conversion factory default settings 50hz. If the base frequency of the inverter is not set before the spindle motor is used, the spindle motor can be burnt down.**
2	Before use, you should use the hand to turn the spindle motor, and confirm that it can rotate smoothly.
3	When in use, you must first connect to the spindle motor cooling water pipes, water pipes to ensure. Water flow is not less than 5L/min
4	If the electric spindle needs to be replaced with a new bearing, Should be replaced by a certain professional and technical personnel. Supporting special tools. The spindle motor should be fully cleaned, the stator coil does not need to be removed.

The Fault	The Reason	The Solution
The electric spindle does not run after start	1.No output or wrong setting for the inverter	check the output and setting of the inverter
	2.Plug not connected	check the plug and connection cable
	3.the cable not connected	
	4.The stator winding burned	change the stator
Few seconds after start,the spindle stop running	1.water inlet	Drying stator
	2.High temperature induced wire insulation damage	change the stator
	3.Lack of phase operation caused over current protection	check the cable connecting of the spindle motor
	4.Start-up time is too short	Extended acceleration time
Motor smoke or shell hair hot	1.The inverter output voltage, frequency is not match with the spindle motor	check the setting of the inverter
	2.the frequency of the inverter is not set correctly	reset the frequency of the inverter
	3.Air duct blockage	check the air duct
Nut loosening when start	Rotation direction error	recorrect the rotation according the instruction on spindle
Noise and vibration	1,bearing damaged	change bearings
	2.Parts precision damage affect dynamic balance	Check dynamic balance
	3.Large spindle runout	change spindle
Nut loosening when stop	Down time is too short	Prolonged deceleration time