



Connection requirement

- 1:Power line: Tricolor power wire and yellow-green ground wire
Temperature control line: Two thin wires of 130℃ thermistor
- 2:Cooling water outlet
- 3:Pressure for tool changing and de-dusting: 0.4MPa
- 4:Pressure of air sealing: 0.2MPa
- 5:Inlet air pressure for tool-removing: 0.70MPa
- 6:Cooling water inlet: delivery of water pump head: 12m (Don't connect wrong)
- 7:Proximity switch: Two PNP (normally open) N.O. for tool-mounting and tool-removing
- 8:Cable of encoder
- 9:Hanging ring

Special warning:

- 1.It shall not change tools before complete stop of spindle.
The manual tool-changing button shall be unavailable while spindle is rotating;otherwise it would cause the block of spindle!
- 2.The compressed air shall be clean and dry with filtering precision of 0.1 μm! Air sealing shall be normally open.It is recommended to apply two levels of filtering with precisions of 0.5μm/0.1μm, and the filter shall be equipped with automatic drainage.
- 3.The air seal shall be kept normally open!
- 4.During the operation, the frequency converter shall be set strictly according to the U-f curve of the spindle.

Connection Description

- 1:Three colored wires are connected with U, V and W phases/
Yellow-green wire is connected with earth
Temperature controlled line is connected externally with temperature control protector
- 2:The quick plug of cooling water outlet is 8/6 hose
- 3:The quick plug for tool-changing and dust-removing is 6/4 hose
- 4:The quick plug for air-sealing is 6/4 hose
- 5:The quick plug for tool-removing is 6/4 hose
- 6:The quick plug of cooling water inlet is 8/6 hose
- 7:Connect brown wire of proximity switch with +24VDC,blue line connected to 0VDC

Signal loading end connected to black line/the other end connected to 0VDC

8:Encoder reading head GS05A-MI-S (1Vpp signal output)

- 9:Hanging ring: applied for mounting

Parameters of PTC130 three-core thermistor	
UK Power Supply	Maximum DC 25V/100mA
-20~25℃	≤300Ω
125℃	≤1650Ω
130℃	Rated function temperature
135℃	≥3990Ω
≥145℃	≥12KΩ
≤125℃	Maximum storage temperature

Wiring for encoder(3)
Circular connector:

Signal	terminal pin number	Colour
VCC+5V	1	Brown
GND	2	White
A+	3	Green
A-	4	Yellow
B+	5	Blue
B-	6	Red
Z+	7	Grey
Z-	8	Pink
External isolation/shielding	10	

Note:1.The remaining terminals are not connected
2. Encoder:GS05A-MI-S(Sine wave 1Vpp)

Model: GDL150Y-40-12Z/17
Voltage: 380V
Power: 17kw(S6-25% 20KW)
Current: 35.2A(S6-25% 42.9A)
Frequency: 400-600Hz
Rotational speed: 8000-12000rpm
Number of Pole: 6P
Phase: 3
Rotation Direction: Counterclockwise viewed from the end of spindle extension
Tool Holder: BT40 with keyway
Pop-rivet: BT40-45°
Weight: 47KG

						Jiangsu HQD Spindle Motor Co., Ltd.		
						外形图		
标记	处数	分区	更改文件号	签名	年、月、日	阶段标记	重量	比例
设计			标准化			S		1:3
审核						共 1 张 第 1 张		
工艺			批准			GDL150Y-40-12Z/17-00-1		