



#### Connection requirement

- 1:Power line: Tricolor power wire and yellow-green ground wire
- 2:Temperature control line: Two thin wires of 130°C thermistor
- 3:Cooling water outlet
- 4:Pressure for tool changing and de-dusting: 0.4MPa
- 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  $\mu$ m! Air sealing shall be normally open. It is recommended to apply two levels of filtering with precisions of 0.5 $\mu$ m/0.1 $\mu$ m, 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
- 2: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

- 8: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

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: The remaining terminals are not connected  
2. Encoder GS05A-MI-S sine wave 1Vpp

45 (Water, electricity, and gas connections)

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

GDL150Y-40-12Z/17-00-1

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								
工艺			批准					

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