

AIH90 series

Patented ID: ZL 2016 2 0034861.6

**Main Features:**

- Enhanced industrial encoder
- Design of double row bearings
- Non - fragile code wheel, high stability

Extensive Application:

- ✓ speed sensor, Angle, distance and trajectory, tilt
- ✓ Iron and steel metallurgy equipment, paper printing, textile machinery
- ✓ Port crane transport machinery, heavy machinery equipment
- ✓ Elevator, machine tools, medicine and factory automation
- ✓ Can be used for high speed rotation
- ✓ Use in non-explosion proof environment

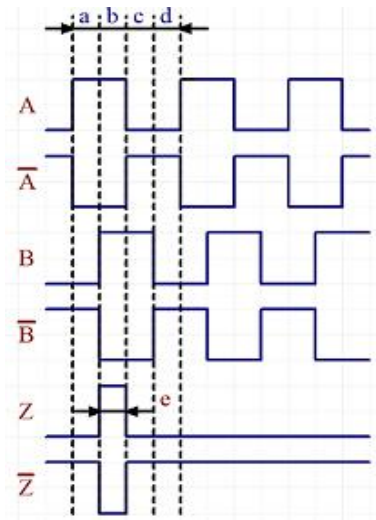
Mechanical specifications**Qualification**

Material	Shell: Aluminum shell	EMC:
	Flange: Aluminum flange	Emitted interference: EN61000-6-4
	Shaft: Stainless steel 304	Noise immunity: EN61000-6-2
Maximum shaft load	Max 100N Axial	ISO9001:2015
	Max 200N Radial	CE authentication
Levels of protection	Shaft: IP54 (Can choose IP65)	
	Cable interface: IP65	
Starting torque	25°C, ≤0.5Nm	
Maximum speed	≤ 6000RPM	
Impact resistance	≤ 100g ,6ms	
Anti-vibration	≤ 10g (10Hz—2000Hz)	
Weight	≈900g	
Working temperature	-20°C...+80°C	
Storage temperature	-30°C...+85°C	
Humidity	98%	

Electrical specifications

Output form	Push-pull (HTL)	RS422(TTL)	NPN collector open
Pulse	Max 1024ppr	Max 1024ppr	Max 1024ppr
Supply voltage	DC10-30V	DC5V or DC10-30V	DC10-30V
Reverse polarity protection			
No-load current	≤80mA	≤80mA	≤80mA
Load current	≤60mA	≤60mA	≤60mA
Response frequency	≤120KHz	≤120KHz	≤120KHz
Rise time (Tr)	≤200nS	≤200nS	/
Falling time(Tf)	≤200nS	≤200nS	/
Signal Top Value	≥Vcc x 70%	≥2.5VDC	/
Signal low level	≤0.5VDC	≤0.5VDC	/

Signal output



From the direction of the lock ring and turning it counterclockwise waveform is presented.

$$a, b, c, d = T/4 \pm 10\%$$

$$e = T/4 \pm 10\%$$

Electrical connection

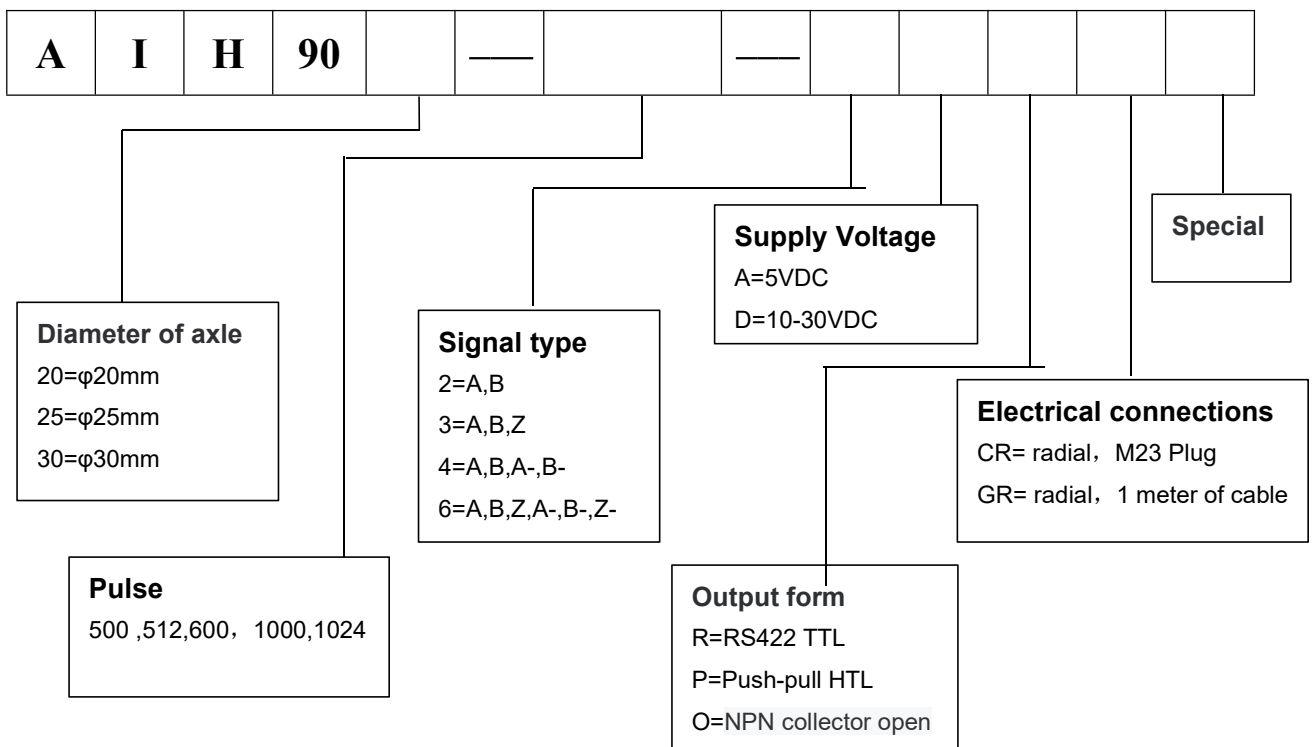
Signal	Cable	Plug
Vcc	BN	2
OV	WH	1
A	GN	3
B	YE	4
Z	GY	5
A-	PK	6
B-	BU	7
Z-	RD	8
G *	Shield	9

* The inner enclosure of the shield wire has been connected



M23 Plug (12pin)

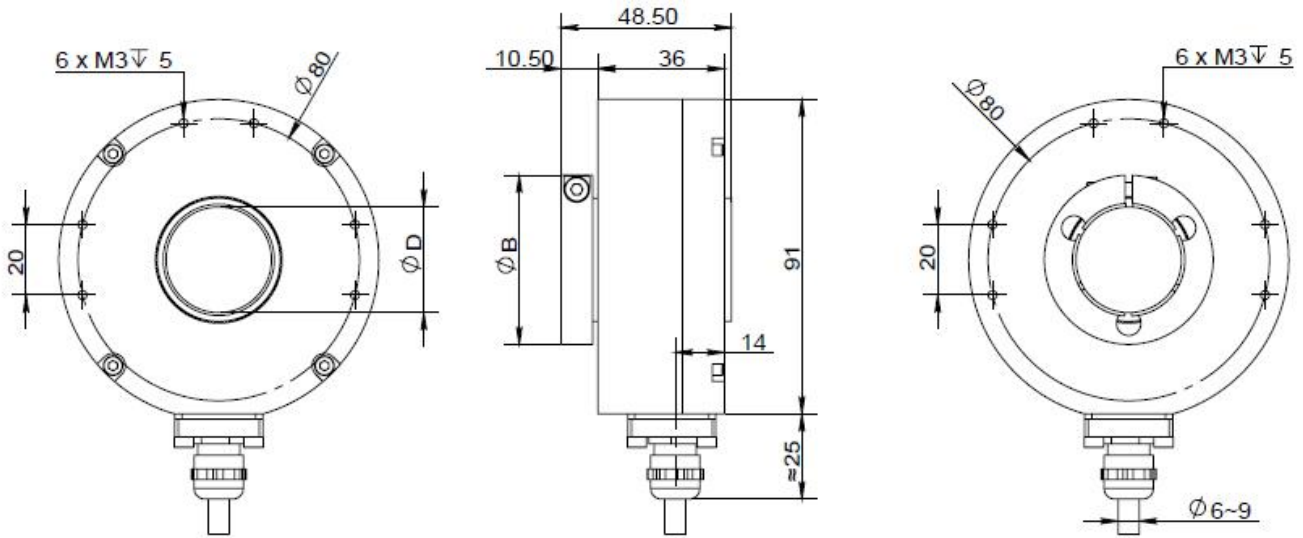
Selection instructions



Mechanical dimension

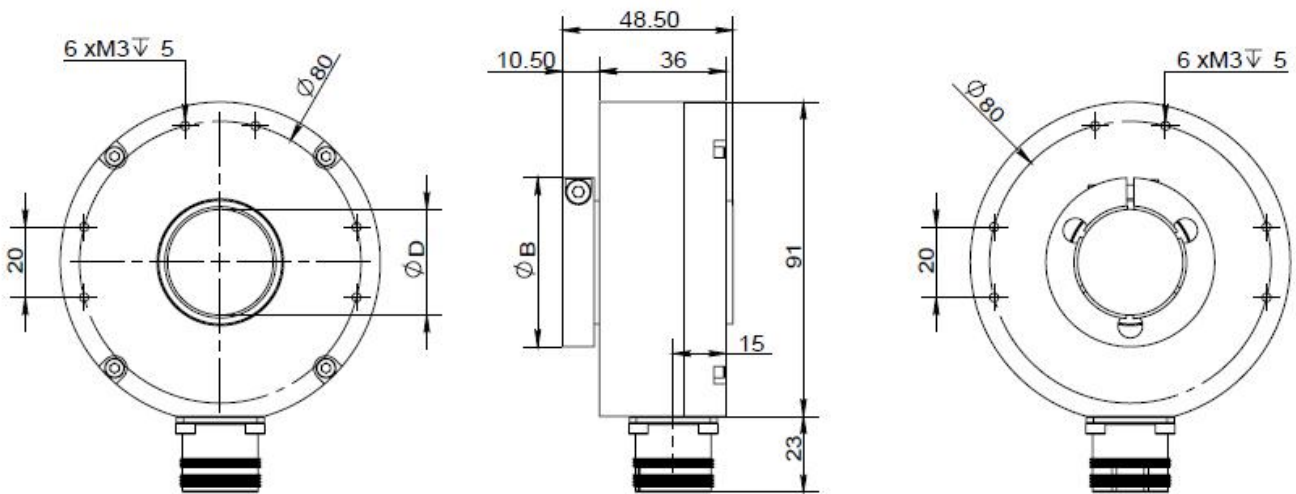
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Unit: mm

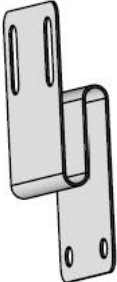
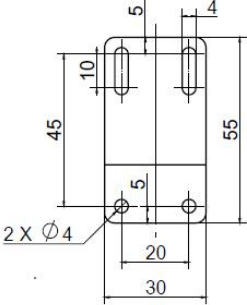
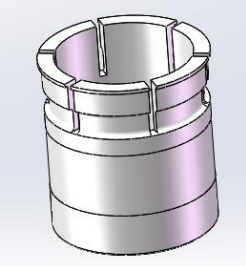


Shaft ϕ	D	20	25	30
Clamping ring ϕ	B	38	43	48

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Accessories

<p>Mounting bracket</p> 	<p>A117 (Standard)</p> 	<p>IH4538 (Retail)</p>  <p>Insulation sleeve 45mm to 38mm PEEK material</p>
		<p>Can effectively isolate shaft current on product damage and interference</p>