# SHAFT TYPE

# OW-2<sub>Model</sub>

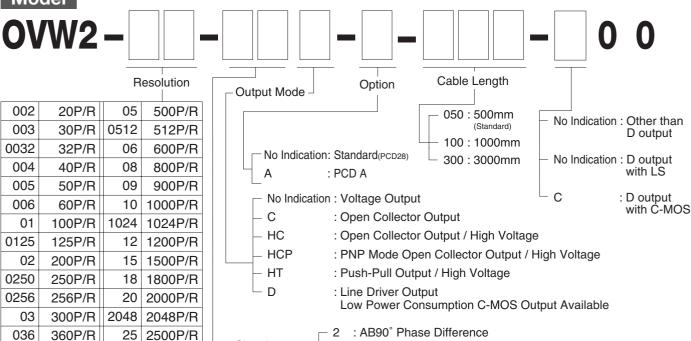


#### **Economical Model**

• Practical Length Reduction from 38mm to 30mm.



04

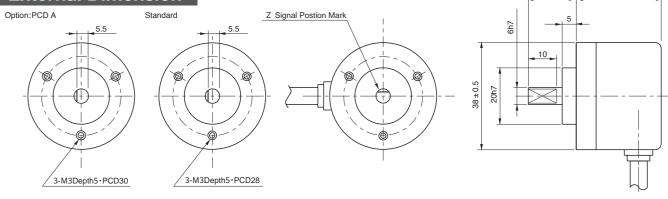


#### **External Dimension**

36

3600P/R

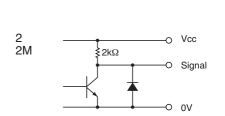
400P/R

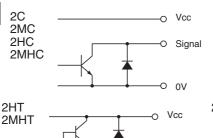


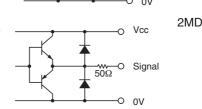
2M: AB90° Phase Difference + Zero Signal

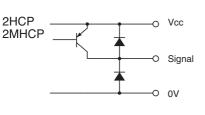
Signals

#### Circuit of Output Signal



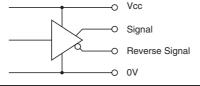






17

30max



### **Electrical Spec.**

%1) at Maximum Output Current

%2) Maximum Source Current

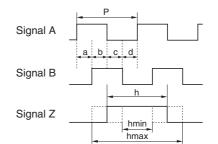
	TYPE	2 • 2M	2C•2MC	2HC•2MHC	2HCP•2MHCP	2HT•2MHT	2MD
Supply Voltage		DC4.5 ~ 13.2 V		DC10.8 ~ 26.4 V		DC4.75 ~ 5.25V C-MOS DC4.5 ~ 5.5V	
Requirement		80 mA Max	60 mA Max		100 mA Max	90 mA Max	150 mA Max C-MOS60 mA Max
Output Voltage	"H"	Within –1 Power Volt			Within –1 <sup>2</sup> Power Volt	Within –3 Power Volt	2.5 V or More
	"L" <sup>※1</sup>	0.5 V Max ———		3 V Max	0.5 V Max		
Maximum Output Current		20 mA MAX			40 mA MAX	20 mA MAX	
Rise & Fall Time		1 μs Max				200 ns Max	
Maximum Frequency Response		200 kHz			50 kHz	200	) kHz
Withstanding Voltage of Output Tr.		50 V MAX					

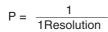
#### Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



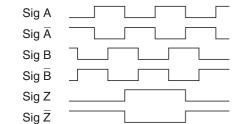
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.





a, b, c, d = 
$$\frac{P}{4} \pm \frac{P}{8} - \frac{P}{2} \le h \le \frac{3P}{2}$$

Wave Ratio (Duty); 50  $\pm$  25 (%)



# **Electrical Connections**

2 2M 2C 2MC 2HC 2HC 2HCP 2HCP 2MHCP 2HT 2MHT

Color of Lead Wire	Description
Red	Power Source
Black	0V Common
Green or Blue	Signal A
White	Signal B
Yellow	Signal Z
Shielding Braid	NČ

2MD	Color of Lead Wire	Description	Color of Lead Wire	Description	
	Red Black Green Blue	Power Source 0V Common Signal A Signal Ā	White Gray Yellow Orange	Signal B Signal B Signal Z Signal Z	
	Shielding Braid	NC			

## Mechanical Spec.

Starting Torque		9.8X10 <sup>-4</sup> N • m Max	
Angular Acceleration		1×10 <sup>5</sup> rad/s <sup>2</sup>	
Shaft Loading	Thrust axial	19.6N	
	Radial	29.4N	
Moment of Inertia		8×10 <sup>-7</sup> kg • m <sup>2</sup>	
Maximum RPM		6000r/min	
Net Weight		100g Max	

## **Environmental Spec.**

Operating Temperature	−10°C ~ +70°C
Storage Temperature	− 30°C ~ +80°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm 2 h
Shock	490m/s²,11ms X, Y, Z Each 3 times
Degree of Protection	IP50