

SHAFT TYPE**OVW-2_{Model}****Economical Model**

- Practical Length Reduction from 38mm to 30mm.

Model

OVW2 - - - - - **00**

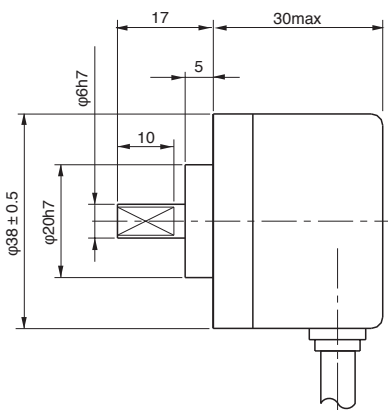
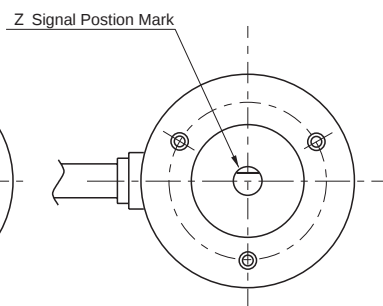
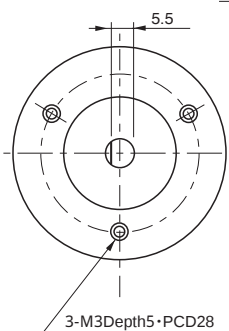
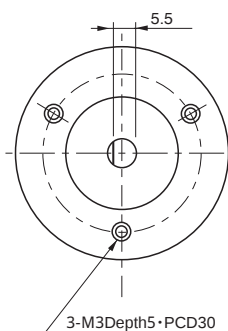
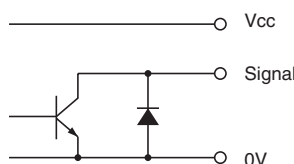
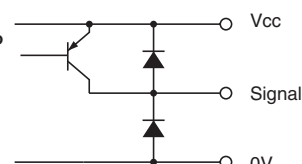
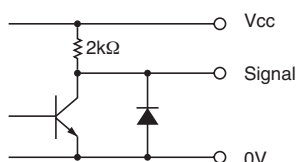
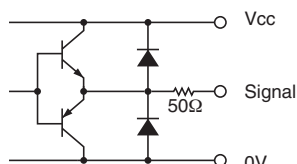
Resolution		Output Mode		Option	Cable Length		
002	20P/R	05	500P/R		050	500mm (Standard)	No Indication : Other than D output
003	30P/R	0512	512P/R		100	1000mm	No Indication : D output with LS
0032	32P/R	06	600P/R		300	3000mm	C : D output with C-MOS
004	40P/R	08	800P/R	No Indication: Standard(PCD28)			
005	50P/R	09	900P/R	A : PCD A			
006	60P/R	10	1000P/R	No Indication : Voltage Output			
01	100P/R	1024	1024P/R	C : Open Collector Output			
0125	125P/R	12	1200P/R	HC : Open Collector Output / High Voltage			
02	200P/R	15	1500P/R	HCP : PNP Mode Open Collector Output / High Voltage			
0250	250P/R	18	1800P/R	HT : Push-Pull Output / High Voltage			
0256	256P/R	20	2000P/R	D : Line Driver Output Low Power Consumption C-MOS Output Available			
03	300P/R	2048	2048P/R				
036	360P/R	25	2500P/R				
04	400P/R	36	3600P/R				

Signals	2 : AB90° Phase Difference
	2M : AB90° Phase Difference + Zero Signal

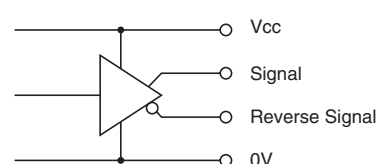
External Dimension

Option:PCD A

Standard

**Circuit of Output Signal**2C
2MC
2HC
2MHC2HCP
2MHCP2
2M2HT
2MHT

2MD



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Output Mode

Option

Cable Length

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0032	32P/R	06	600P/R
004	40P/R	08	800P/R
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006	60P/R	10	1000P/R
01	100P/R	1024	1024P/R
0125	125P/R	12	1200P/R
02	200P/R	15	1500P/R
0250	250P/R	18	1800P/R
0256	256P/R	20	2000P/R
03	300P/R	2048	2048P/R
036	360P/R	25	2500P/R
04	400P/R	36	3600P/R

No Indication: Standard(PCD28)
A : PCD A

No Indication : Voltage Output
C : Open Collector Output
HC : Open Collector Output / High Voltage
HCP : PNP Mode Open Collector Output / High Voltage
HT : Push-Pull Output / High Voltage
D : Line Driver Output
Low Power Consumption C-MOS Output Available

Signals — 2 : AB90° Phase Difference
2M : AB90° Phase Difference + Zero Signal

050 : 500mm
(Standard)
100 : 1000mm
300 : 3000mm

No Indication : Other than D output

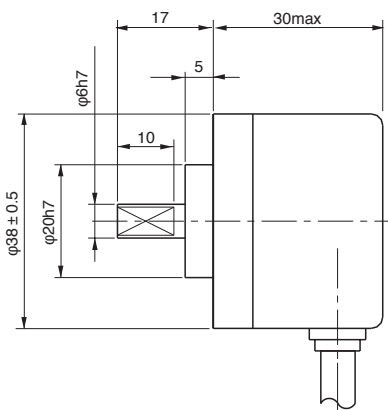
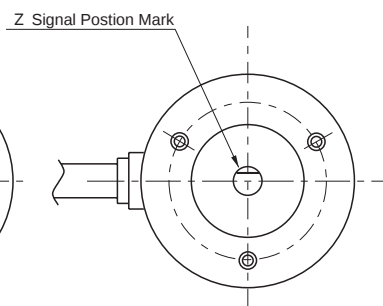
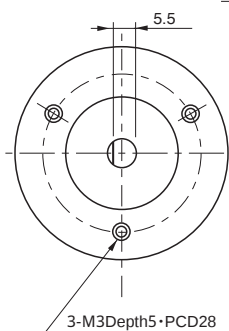
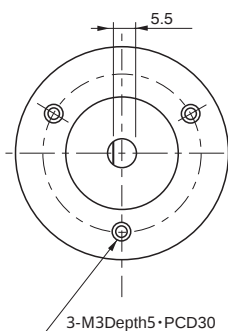
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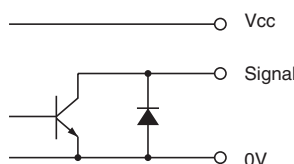
External Dimension

Option:PCD A

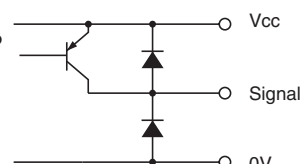
Standard

**Circuit of Output Signal**

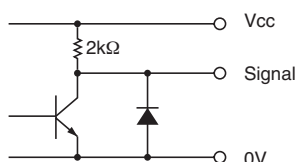
2C
2MC
2HC
2MHC



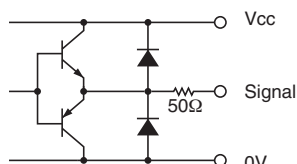
2HCP
2MHCP



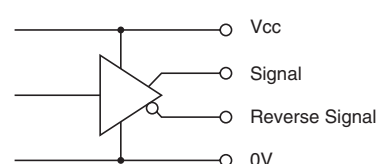
2
2M



2HT
2MHT



2MD



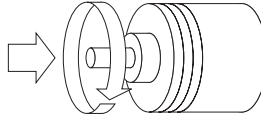
Electrical Spec.

※1) at Maximum Output Current ※2) Maximum Source Current

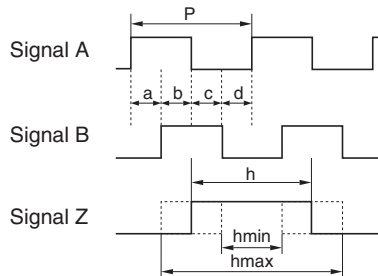
TYPE		2・2M	2C・2MC	2HC・2MHC	2HCP・2MHCP	2HT・2MHT	2MD
Supply Voltage		DC4.5 ~ 13.2 V		DC10.8 ~ 26.4 V			DC4.75 ~ 5.25V C-MOS DC4.5 ~ 5.5V
Requirement		80 mA Max	60 mA Max		100 mA Max	90 mA Max	150 mA Max C-MOS60 mA Max
Output Voltage	“H”	Within -1 Power Volt	_____		Within -1 ² Power Volt	Within -3 Power Volt	2.5 V or More
	“L”※1	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



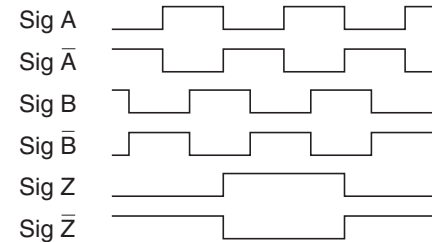
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



$$P = \frac{1}{1\text{Resolution}}$$

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

Wave Ratio (Duty); 50 ± 25 (%)

**Electrical Connections**

	Color of Lead Wire	Description
2	Red	Power Source
2M	Black	0V Common
2C	Green or Blue	Signal A
2MC	White	Signal B
2HC	Yellow	Signal Z
2MHC	Shielding Braid	NC
2HCP		
2HT		
2MHT		

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

Mechanical Spec.

Starting Torque		9.8×10 ⁻⁴ N・m Max
Angular Acceleration		1×10 ⁵ rad/s ²
Shaft Loading	Thrust axial	19.6N
	Radial	29.4N
Moment of Inertia		8×10 ⁻⁷ kg・m ²
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/s ² , 11ms X, Y, Z Each 3 times
Degree of Protection	IP50

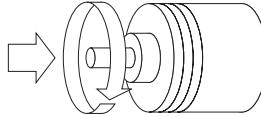
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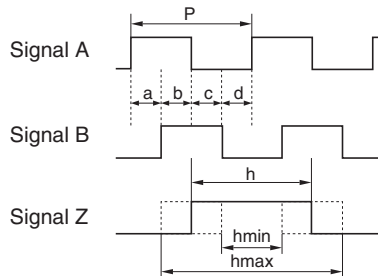
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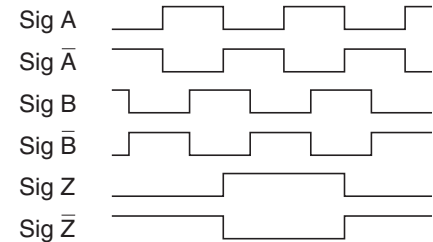
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