

SHAFT TYPE

OEZ Model



Small High-Speed Model

- High Speed Response Frequency 150kHz.
- Up to 1500P/R.

Model

OEZ--2M---00E

Resolution

0036	36P/R	04	400P/R
005	50P/R	05	500P/R
006	60P/R	0512	512P/R
01	100P/R	06	600P/R
015	150P/R	08	800P/R
02	200P/R	10	1000P/R
025	250P/R	1024	1024P/R
03	300P/R	15	1500P/R
036	360P/R		

Power Supply(Vcc)

05 : 5V
12 :12V
24 :24V

Cable Length

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

Complying with RoHS

TÜV CE

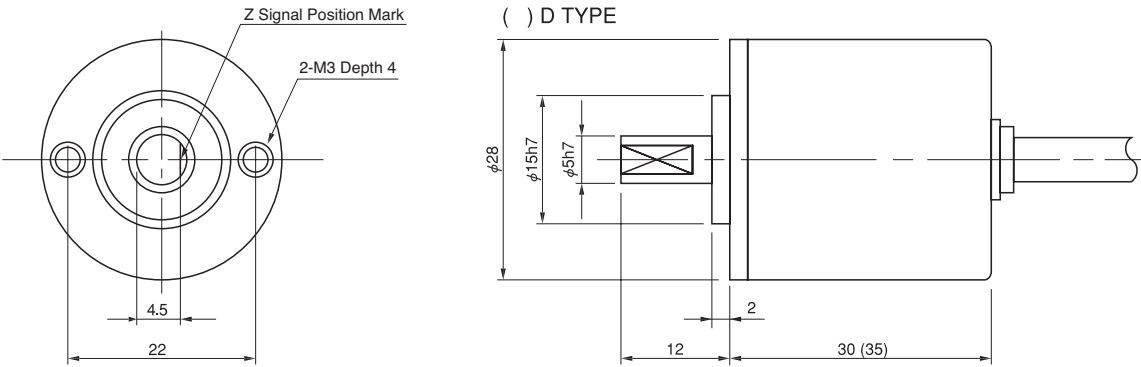
Output Mode

No Indication : Voltage Output(Except 24V mode)
C : Open Collector Output
D : Line Driver Output(The Power Supply(Vcc) is only 5V)

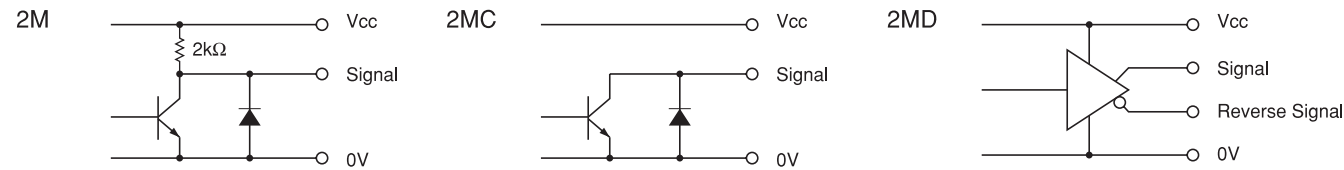
Signals

2M : AB90° Phase Difference + Index Signal

External Dimension



Output Circuit



Electrical Spec

TYPE		2M	2MC	2MC-24	2MD
Power Supply(Vcc)		DC4.5~5.5V DC10.8~13.2V		DC21.6~26.4V	DC4.75~5.25V
Current Consumption		80mA Max	60mA Max		150mA Max
Output Voltage	“H”	Vcc-1V Min	—————		2.5V Min
	“L” ※1	0.5V Max			
Maximum Sink Current		20 mA			
Rise & Fall Time		1μs Max			200 ns Max
Maximum Frequency Response		150kHz			
Withstanding Voltage of Output Tr.		—————	50 V Max		—————

※1) at Maximum Sink Current

Wave Form

CW → Rotating Toward Clockwise Viewed from an Arrow

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

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

Wave Ratio (Duty); 50 ± 25 (%)

2MD

Sig A

Sig A̅

Sig B

Sig B̅

Sig Z

Sig Z̅

Electrical Connections

2M 2MC	Color	Signal	2MD	Color	Signal	Color	Signal
	Red	Power Supply(Vcc)		White	Signal B		
	Black	0V		Gray	Signal B̅		
	Green or Blue	Signal A		Yellow	Signal Z		
	White	Signal B		Orange	Signal Z̅		
	Yellow	Signal Z					
	Shield	NC					

Mechanical Spec

Starting Torque		9.8×10 ⁻⁴ N·m Max
Angular Acceleration		1×10 ⁵ rad/s ²
Shaft Loading	Thrust	4.9N
	Radial	9.8N
Moment of Inertia		2×10 ⁻⁷ kg·m ²
Maximum Permissible Speed		6000min ⁻¹
Net Weight		60g Max

Environmental Spec

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