

- **2 Channels w/ Reference Pulse**
- **18mm Diameter**
- **Dual Ball Bearings**
- **100 ~ 500 PPR Resolution**
- **6000 RPM**

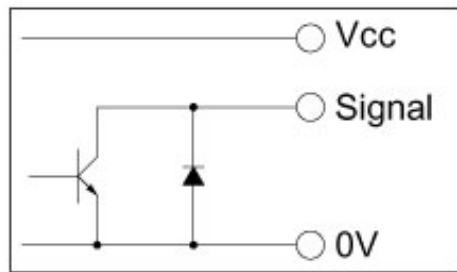


The MOM20 series optical encoder is characterized by economy, high resolution and very long life. Rugged design features aluminum housing, metal shaft and dual ball bearings making it ideal for applications where a high quality encoder with long life is required.

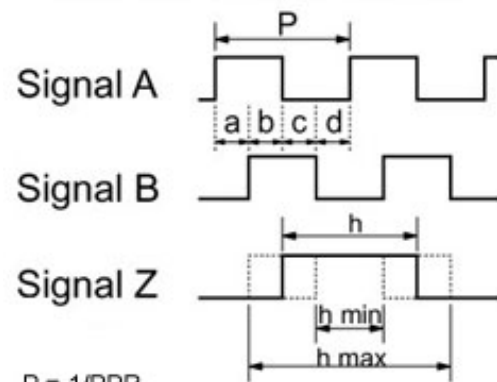
Electrical Specifications	
Resolution	100, 200, 250, 256, 300, 360, 500
Channels	A, B, Z
Frequency Response	50 kHz
Supply Voltage	5VDC ±10% (optional 12VDC ±10%)
Voltage Withstand	50V max. (output transistor)
Current Consumption	50mA max.
Output Voltage - High	Vsupply max.
Output Voltage - Low	0.5V max.
Sink Current	20mA max.
Signal Risetime	1µS max.
Mechanical Specifications	
Moment of Inertia	0.1 g-cm <sup>2</sup>
Angular Acceleration	1x 10 <sup>4</sup> rad/S <sup>2</sup>
Max Slewing Speed	6000 RPM
Starting Torque	5 gf-cm max.
Shaft Radial Load	200 gf
Shaft Axial Load	200 gf
Weight	20 grams
Environmental Specifications	
Operating Temperature	-10°C to +70°C
Storage Temperature	-30°C to +85°C
Humidity	85% RH, no condensation
Vibration	10 - 50 Hz, 1.5mm, 2 hrs.
Shock	50G, 11ms, 3 axes, 3 reps
Protection Grade	IP 55
Materials	
Housing	Nickel plated brass
Shaft	Steel

## Schematic and Output Waveform Type

### Open Collector



Clockwise rotation viewed from front



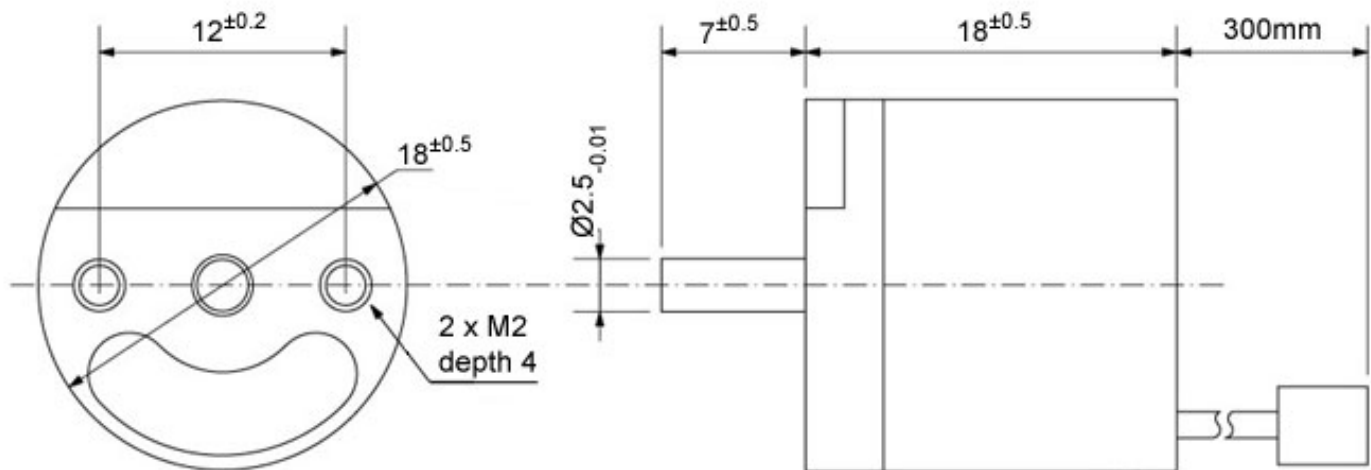
$$P = 1/PPR$$

$$a, b, c, d = P/4 \pm P/8$$

$$h = P \pm 0.75P$$

$$\text{Wave Duty Ratio: } 50\% \pm 25\%$$

## Dimensions (mm)



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