

- **2 Channels w/ Reference Pulse**
- **IP65 Protection Grade**
- **39mm Diameter**
- **5000 RPM**
- **30 to 3600 PPR**



The MOZ40 series incremental encoder is characterized by high resolution and very long life. Rugged design features and IP65 (sealed) aluminum housing, metal shaft and ball bearings making it ideal for applications where a high quality encoder with long life is required in adverse environmental conditions.

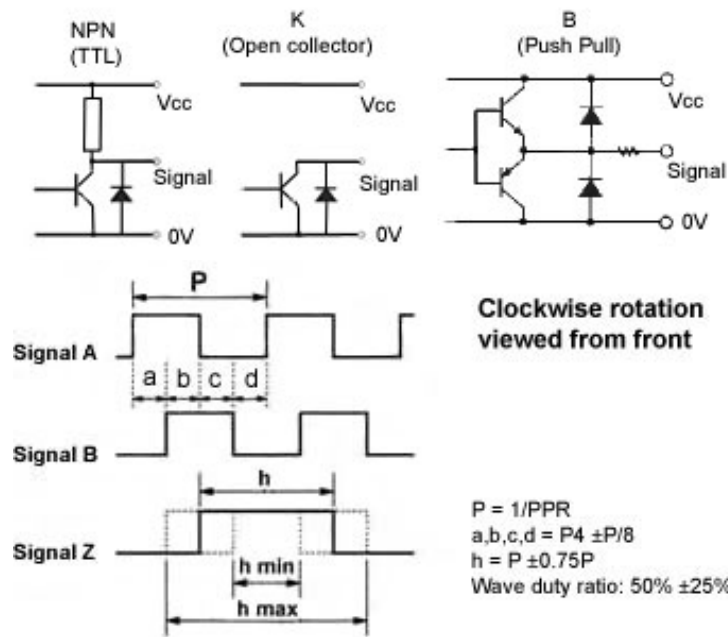
Electrical Specifications	NPN	K	B	N
Resolution (PPR)	30, 32, 40, 50, 60, 100, 125, 200, 256, 300, 360, 400, 500, 512, 600, 800, 900, 1000, 1024, 1200, 1500, 1800, 2000, 2048, 2500, 3600			
Channels	A, B, Z			
Frequency Response	200 kHz			
Supply Voltage (VDC)	4.5 ~ 13.2	4.5 ~ 13.2 or 10.8 ~ 26.4	10.8 ~ 26.4	4.75 ~ 5.25
Current Consumption	80mA max	60mA max.	90mA max.	150mA max
Output Voltage - High	Vcc - 1V (min.)	Vcc	Vcc - 3V (min.)	2.5 V (min.)
Output Voltage - Low	0.5V max.		3.0V max.	0.5V max.
Sink Current	20mA max.		40mA max.	20mA max.
Signal Risetime	1µS max.			200 nS max.

Mechanical Specifications	
Angular Acceleration	1x 10 <sup>5</sup> rad/S <sup>2</sup>
Max Slewing Speed	5000 RPM
Starting Torque	49 gf-cm max.
Shaft Radial Load	3.0 kgf
Shaft Axial Load	2.0 kgf
Weight	140 grams

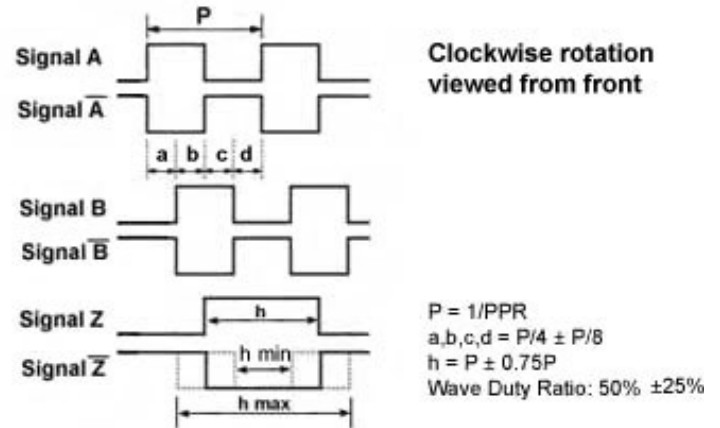
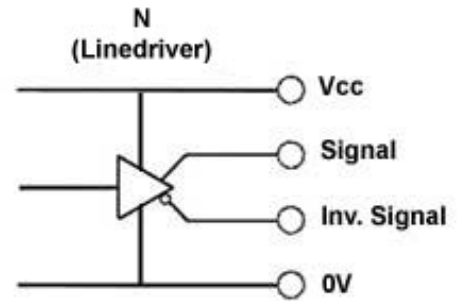
Environmental Specifications	
Operating Temperature	-10°C to +70°C
Storage Temperature	-30°C to +80°C
Humidity	85% RH, no condensation
Vibration	10 - 55 Hz, 1.5mm, 2 hrs.
Shock	294 m/s <sup>2</sup> , 11ms, 3 axes, 3 reps
Protection Grade	IP 65

Materials	
Housing	Aluminum
Shaft	Metal

## Schematic and Output Waveform Types

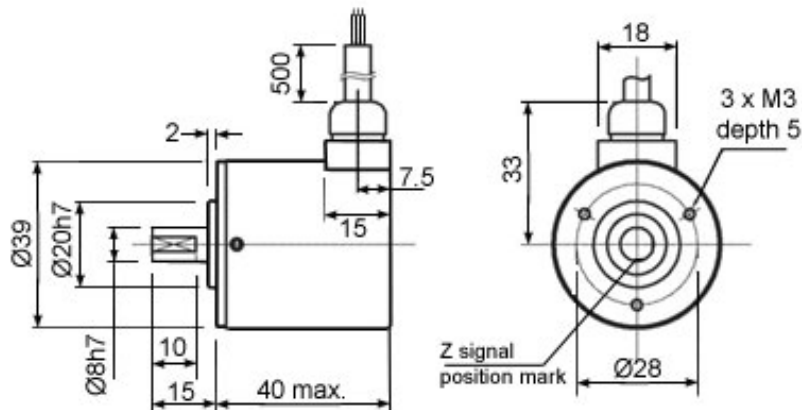


Wire Color	Connection	Wire Color	Connection
Red	+ Power	Yellow	Signal Z
Black	0V - GND	Shield	NC
Green / Blue	Signal A		
White	Signal B		



Wire Color	Connection	Wire Color	Connection
Red	+ Power	White	Signal B
Black	0V - Gnd.	Gray	Signal /B
Green	Signal A	Yellow	Signal Z
Blue	Signal /A	Orange	Signal /Z
Shield	NC		

## Dimensions (mm)



*P3 America*

3089C Clairemont Dr. #363 - San Diego, CA 92117

Phone: (858) 277-1420 Fax: (858) 225-0439

[www.p3america.com](http://www.p3america.com)