

HOLLOW TYPE

Small & Short delivery Model

38HG Model



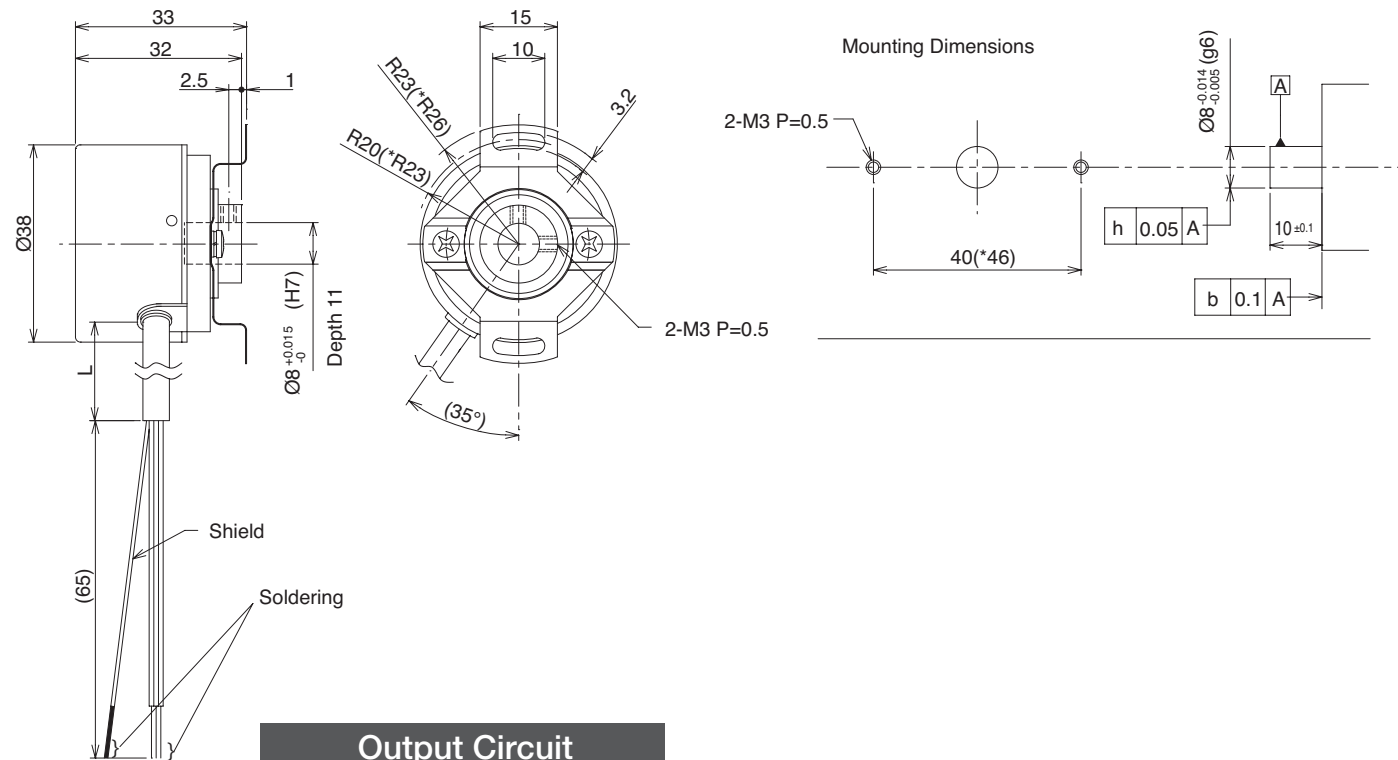
• Compact Sized Encoder with OD38mm x L33mm.



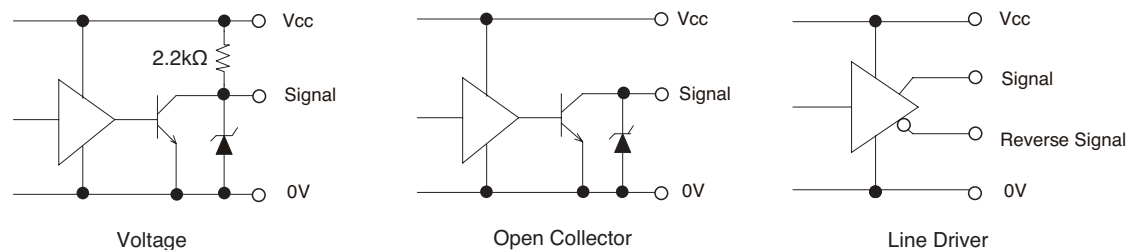
Model 38HG- [ ] - [ ] - 8-50-N [ ] [ ] E

Resolution	2 : Signal A,B 2M : Signal A,B,Z	Hollow Shaft Diameter 8 : φ8	Cable Length 50 : 500mm	Mounting 00: PCD40mm 01: PCD46mm	Complying with RoHS							
Output Mode	V : Voltage Output C : Open Collector Output D : Line Driver Output											
Signal A,B,Z	500	500P/R	1000	1000P/R	1024	1024P/R	1800	1800P/R	2000	2000P/R	2048	2048P/R
Signal A,B	100	100P/R	200	200P/R	300	300P/R	360	360P/R	400	400P/R	600	600P/R

External Dimension



Output Circuit

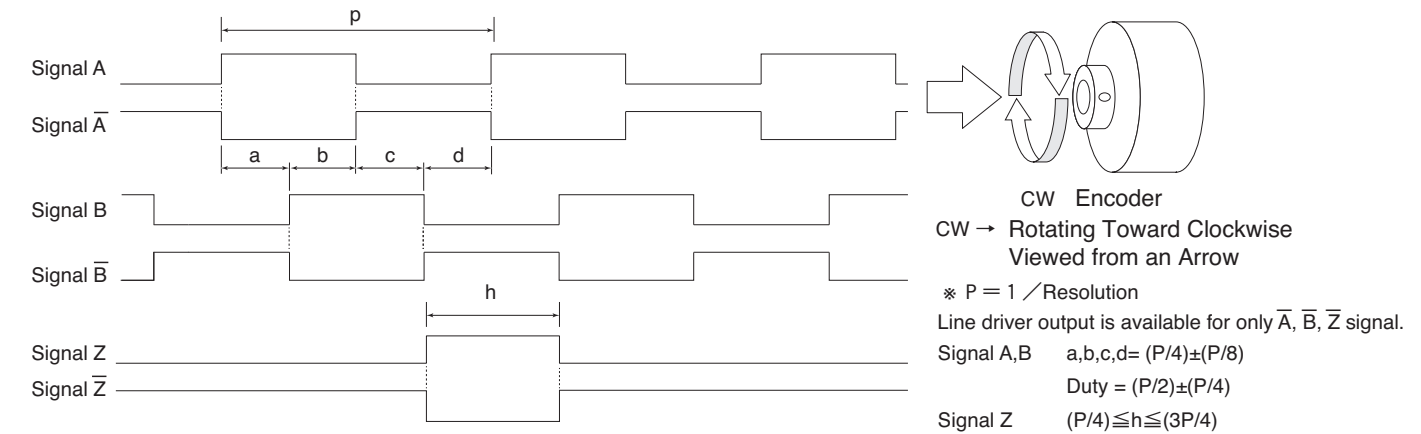


Electrical Spec

TYPE	2V 2MV	2C 2MC	2D 2MD
Power Supply(Vcc)	DC 3.35V to 13.2V (Ripple 3% or less (P-P))	DC 3.35V to 34.5V (Ripple 3% or less (P-P))	DC 3.35V to 5.25V (Ripple 3% or less (P-P))
Current Consumption	400mA Max		
Output Voltage	"H" Vcc-1V Min	-	2.5V Min
"L" *1	0.4V Max		0.5V Max
Maximum Sink Current	20mA	35mA	20mA
Maximum Frequency Response	120kHz		
Rise & Fall Time	1μs Max (sink current 10mA / cable length 2m)	1μs Max (load 1kΩ / cable length 2m)	100ns Max (current ±20 mA)

\*1) at Maximum Sink Current

Wave Form



Electrical Connections

Open Collector · Complementary		Line Driver	
Red	Vcc	Red	Vcc
Black	0 V	Black	0 V
Blue	Sig A	Green	Sig A
White	Sig B	Blue	Sig $\bar{A}$
Yellow	Sig Z	White	Sig B
Shield	N.C	Gray	Sig $\bar{B}$
		Yellow	Sig Z
		Orange	Sig $\bar{Z}$
		Shield	N.C

Mechanical Spec

Starting Torque	0.98x10 <sup>-3</sup> N · m Max
Angular Acceleration	1x10 <sup>5</sup> rad/s <sup>2</sup>
Shaft Loading	Thrust 9.8N
	Radial 29.4N
Moment of Inertia	1x10 <sup>-6</sup> kg · m <sup>2</sup>
Maximum Permissible Speed	6000min <sup>-1</sup>
Net Weight	120g Max (Without Cable)

Environmental Spec

Operating Temperature	-10°C ~ +85°C
Storage Temperature	-30°C ~ +85°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm X, Y, Z Each 2h
Shock	490m/s <sup>2</sup> , 11ms X, Y, Z Each 3 times
Ingress Protection	IP50