

Incremental 38-mm-Dia. Rotary Encoder

MCT38A/MCT38B/MCT38C

2 or 4 phase type

General purpose Encoder with External Diameter of 38mm

- Incremental model 2 or 4 phase type
- External diameter of 38mm
- Resolution available for 300/360/400/600.
- Various output type
- Solid shaft with Dia at 6 mm



Ordering Information

MCT38A/MCT38B/MCT38C

1 2 3 4 5 6 7

Section 1: Basic model name

- MCT38A:** 38mm Rotary Encoder(Mounting type A)
MCT38B: 38mm Rotary Encoder(IP64)(Mounting type B)
MCT38C: 38mm Rotary Encoder(Mounting type C)

Refer to drawings for the difference between MCT38A/MCT38B/MCT38C

Section 2: Shaft Size

- 6:** Solid shaft with Dia at 6 mm

Section 3: Resolution

- 300:** 300 ppr
360: 360 ppr
400: 400 ppr
600: 600 ppr

For 2 or 4 phase type, the option for resolution is limited to listed as above 300/360/400/600 PPR.other pulse is not available

Ratings and Specifications

- Power supply:** 8-30 VDC
Resolution: 300/360/400/600 ppr
Current consumption: 100mA(Load disconnected)
Load current: 50mA maximum per channel
Output type: NPN/PNP open collector/Complementary/Voltage/Line Driver/Push-Pull(HTL with reverse signal)
Frequency: 100K HZ Frequency=RPM*Resolution/60
Maximum permissible speed: 4000 rpm
Shaft loading radial: 10N
Shaft loading thrust: 20N
Weight: Approx 0.2KG
Protection level: IP50
Temperature: operation(-10°C~+70°C), storage(-30°C~+85°C)
Vibration resistance: 50m/s, 10-65 HZ, 1 mm double amplitude for 2 hours each in X, Y, and Z directions
Shock resistance: 980m/s, 6m/s 2 times each in X, Y, and Z directions
Starting torque: 1 x 10⁻³ N.m Maximum

Section 4: Output phase

- 2:** A B
4: A \bar{A} B \bar{B}

Section 5: Output type

- C:** Complementary(also known as Totem Pole)
N: NPN Open collector
P: PNP Open collector
V: Voltage output
L: Line driver(**Power source 5VDC ONLY,Phase 4**)
T: Push-Pull(**With inverted signal,Phase 4**)

Section 6: Power Supply

- 8:** 8-30 VDC(+/- 5%)
5: 5 VDC(+/- 5%)

Section 7: Cable outgoing type

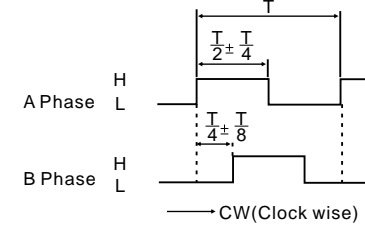
- G:** Side entry cable
E: Rear entry cable

▲ Standard cable length is 2M

Output circuits and wave forms

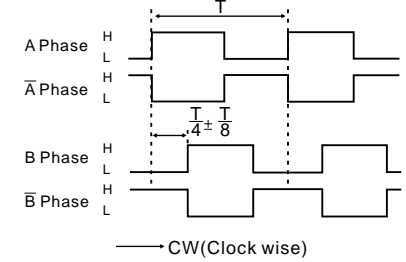
Wave forms

Complementary/Open collector(NPN&PNP)/Voltage output

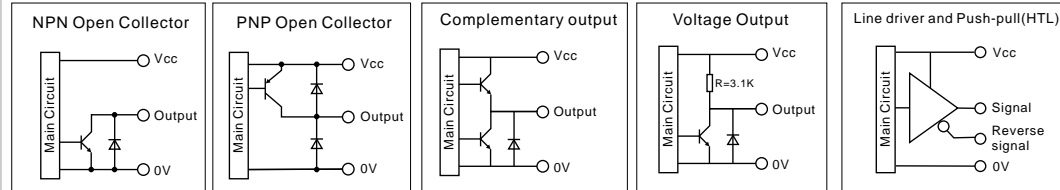


CW: As viewed from the shaft

Line Driver(RS422)/Push-pull(HTL with reverse signal)

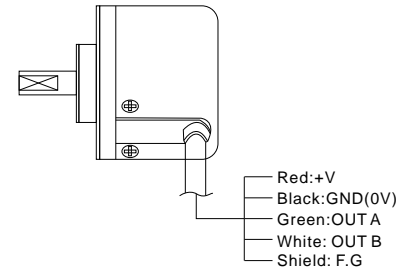


Output circuits

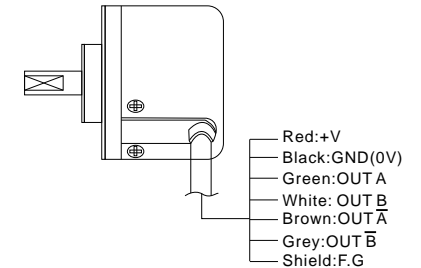


Wiring Details

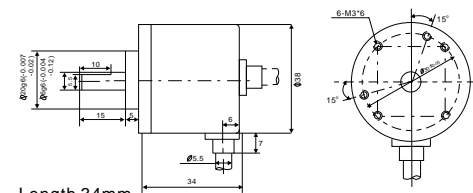
Complementary/Open collector(NPN/PNP)/Voltage output



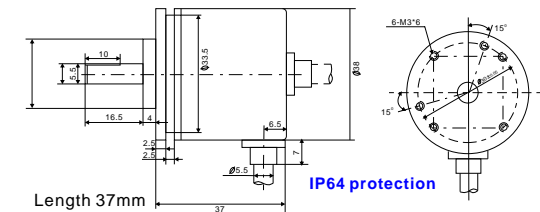
Line Driver/Push-pull(HTL with reverse signal)



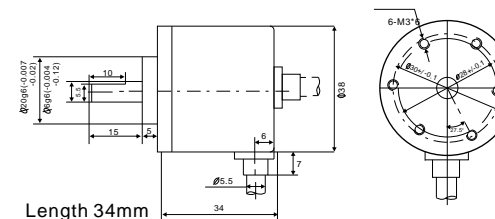
Mounting and Dimensions



MCT38A(Mounting Type A)



MCT38B(Mounting Type B)



MCT38C(Mounting Type C)