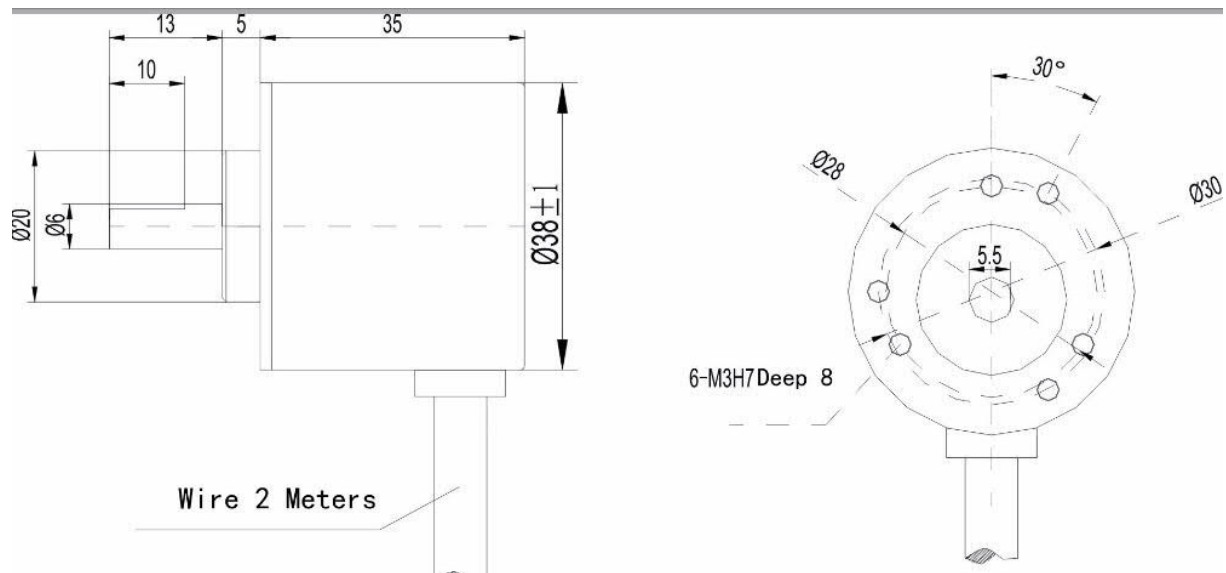


# HN3806 Photoelectric Rotary Encoder



## Description:

HN3806 Photoelectric Incremental AB Two Phases Shaft NPN Rotary Encoder [5V-24V] is an AB two-phase, incremental rotary encoder, which can be used for detecting and measuring the position or rotational speed of an object, according to its degree angle locomotion. A rotary encoder, known as a shaft encoder, is an electro-mechanical transducer, to convert the angular position or locomotion to an electrical signal (digital or analog signal). This transducer uses optical sensing technology, which gives the most accurate results with high resolution. This incremental encoder converts the angular position of its rotor to a series (AB two-phase) of square waves, by utilizing a rotating grating disk and optocoupler. This HN3806 encoder can be used for detecting and measuring the angle, speed, length, and acceleration of the desired objects, which is useful for smart controlling of any displacement and fixed-length in CNC machine, motor feedback and any closed-loop control systems. This encoder is based on metallic construction, so it is rugged and rigid, which is idealized for stressful industrial conditions such as oil well drilling, industrial machine control, agricultural automation, web process control, robotics, elevators, construction equipment, cranes, and so on.

## Features:

Model: HN3806-AB

Pulse Number: 100 / 200 / 360 / 400 / 600 / 1000 ( Optional )

Power source: DC 5-24V

Shaft diameter: 6mm

Outer diameter: 38mm

Output: AB 2phase output rectangular orthogonal pulse circuit, the output for the NPN open-collector output type

Maximum mechanical speed: 5000 R / min

Response frequency: 30KHz

Cable length: 2 meter

**Connection:**

Green = A phase, white = B phase, red =  $V_{cc}$  power +, black =  $V_0$

**Note:**

AB two-phase output should not be directly connected to VCC, otherwise, it will burn the output triode.

<b>Electrical Parameters</b>	
Frequency	30KHz
Voltage	DC 5-24V
Speed	5000 R / min
<b>Physical Parameters</b>	
Weight	169g
Outer Diameter	38mm