



### 용도 Application

1. 산업용  
Industrial application
2. 계측용 장비  
Measuring instruments

### 특징 Feature

1. 축경 소형  
Small shaft
2. 광범위한 전압  
Wide ranging power source
3. 다양한 펄스 구현  
Various Pulses Built in

## 형 식 Model

### WJE138S16

- WJE  
FAE Encoder
- S: 실축  
Solid shaft
- 16: 축경  
Shaft size

### 분해능(P/R)

|          |         |         |         |         |
|----------|---------|---------|---------|---------|
| <b>A</b> | ① 100.  | ① 200.  | ② 300.  | ③ 500.  |
|          | ④ 512.  | ⑤ 600.  | ⑥ 1000. | ⑦ 1024. |
|          | ⑧ 1200. | ⑨ 1500. | Ⓐ 1536. | Ⓑ 2000. |
|          | Ⓒ 2048. | Ⓓ 2400. | Ⓔ 3600. | Ⓕ 4096. |
| <b>B</b> | ① 10.   | ① 128.  | ② 192.  | ③ 256.  |
|          | ④ 360.  | ⑤ 384.  | ⑥ 400.  | ⑦ 720.  |
|          | ⑧ 800.  | ⑨ 900.  | Ⓐ 1600. | Ⓑ 1800. |
|          | Ⓒ 2500. | Ⓓ 2560. | Ⓔ 3000. | Ⓕ 8192. |
| <b>C</b> | ① 25.   | ① 100.  | ② 120.  | ③ 200.  |
|          | ④ 300.  | ⑤ 400.  | ⑥ 500.  | ⑦ 600.  |
|          | ⑧ 900.  | ⑨ 1200. | Ⓐ 1500. | Ⓑ 1536. |
|          | Ⓒ 2000. | Ⓓ 2048. | Ⓔ 2400. | Ⓕ 2500. |
| <b>D</b> | ① 3.    | ① 4.    | ② 20.   | ③ 24.   |
|          | ④ 30.   | ⑤ 40.   | ⑥ 60.   | ⑦ 150.  |
|          | ⑧ 250.  | ⑨ 600.  | Ⓐ 750.  | Ⓑ 900.  |
|          | Ⓒ 1200. | Ⓓ 2800. | Ⓔ 5000. | Ⓕ 6000. |

## 주요 특성 Specification

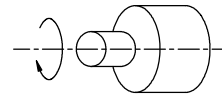
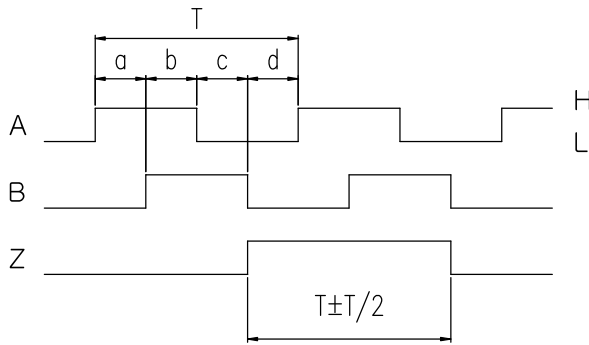
### 전기적 특성 Electrical spec

|   |                      |                           |                             |
|---|----------------------|---------------------------|-----------------------------|
| 분해능<br>Resolution                       |                      | 10~8192 P/R               |                             |
| 출력 방식<br>Output form                    | 출력 형태<br>Output form | 전원<br>Power supply        | 소비전류<br>Current consumption |
|   | Push-pull (HTL)      | DC<br>10.8~26.4V          | 150mA 이하                    |
| Output phase                            |                      | A-phase, B-phase, Z-phase |                             |
| High Level Output Voltage               |                      | Vcc 3.5V                  |                             |
| Low Level Output Voltage                |                      | 2V or Less                |                             |
| 최대 응답 주파수<br>Maximum response frequency |                      | 200 KHz                   |                             |
| 결선<br>Connection                        |                      | 단자대 (Terminal)            |                             |

### 기계적 특성 Mechanical spec

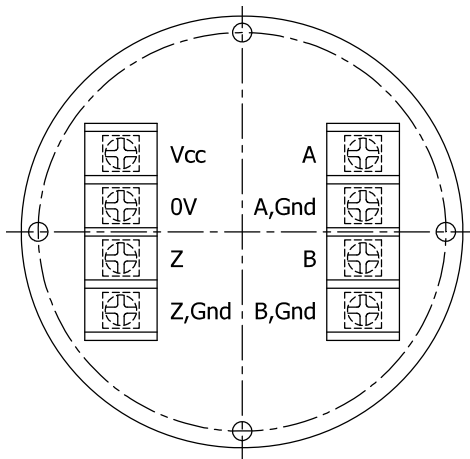
|                                  |                                      |
|----------------------------------|--------------------------------------|
| 기동 토크<br>Starting torque         | 0.04 Nm                              |
| 최대 회전수<br>Maximum rotating speed | 6000 rpm                             |
| 허용 축 하중<br>Allowable shaft load  | Radial 방향 : 70 N<br>Thrust 방향 : 50 N |
| 사용 온도<br>Operating temp. range   | -20 ~ 80 °C                          |
| 내진동<br>Vibration                 | 200 m/S <sup>2</sup>                 |
| 내충격<br>Shock                     | 2000 m/S <sup>2</sup>                |
| 중량<br>Weight                     | 7.5Kg                                |

**출력파형** *Output phase*

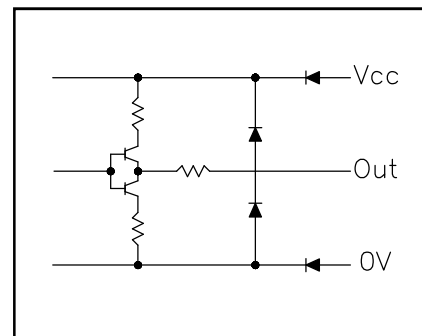


CCW Sensor  
 $a+b, c+d=T/2 \pm T/10$   
 $a, b, c, d=T/4 \pm T/10$

**결선도** *Connection table*



**출력회로** *Output circuit*



**외형도** *External Dimension*

