

Contactless Hall-IC Tilt Angle Sensor

# WR-7UHA360

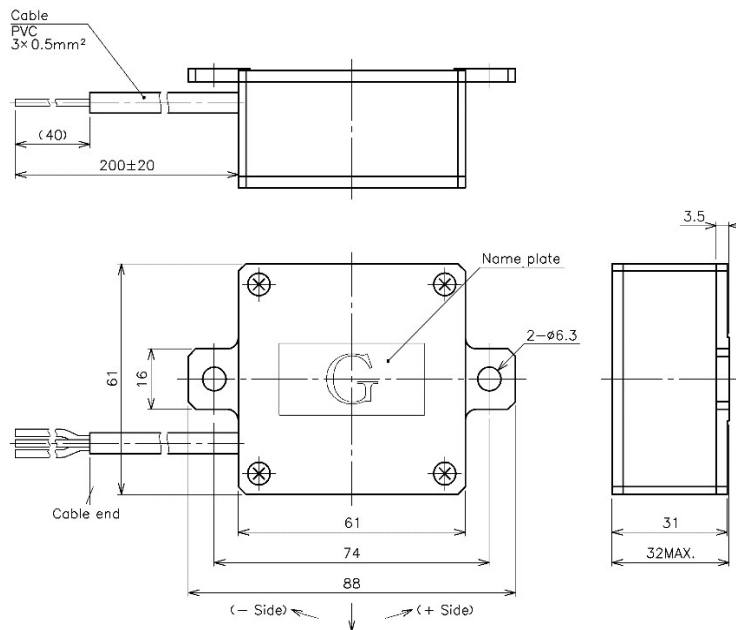


- Hall-IC Inclinator
- Effective Electrical Travel : 359.9°
- Absolute Linearity :  $\pm 0.4\%$  (FS=360°)
- High Environmental Performance
  - IP64
  - EMS 100V/m

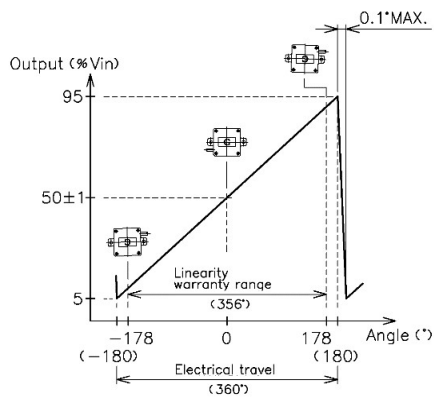
**【Material】**

- Housing : Aluminum

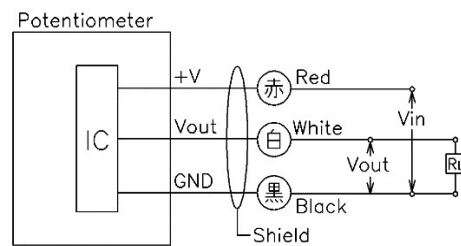
**Dimension (mm)**



**Output Characteristics**



**Schematic**



• Red, white and black indicate cable colors.

<b>【Model No.】</b>	<b>WR-7UHA360</b>
<b>Electrical Specifications</b>	
Effective Tit Angle	±180° (Dead Angle 0.1°)
Index Point	50±1%Vin
Absolute Linearity	±0.4%FS (FS=360°)
Tilt Sensitivity	1.08°MAX. (0.3%FS MAX. FS=360°) including hysteresis
Input Voltage	DC5V±0.5V
Load Resistance (RL)	10KΩ MIN.
Supply Current	10mA MAX.
Temp. Characteristic	-30 ~ +80°C (Reference Temp. +25°C) ±1.08° (±0.3%FS, FS=360°)
<b>Mechanical Specifications</b>	
Total Mechanical Tilt Angle	360° Endless
Damping Time Constant	Approx.0.3sec/45°/25°C
Oil Viscosity	500mm <sup>2</sup> /S
Mass	Approx. 260g
<b>Environmental Specifications</b>	
Operating Temperature	-30 ~ +80°C
Storage Temperature	-40 ~ +80°C
IP Level	IP64 (Except cable end)
Vibration	50m/S <sup>2</sup> ,5 ~ 500Hz, 6min, 3axis 2hours (Room Temp.)
Shock	500m/S <sup>2</sup> ,11ms, 6axis 3times (Room temp.)
EMS	100V/m ,200MHz ~ 1Ghz (ISO11452-2), output error:±1%Vin
ESD	±15KV (IEC61000-4-2)

#### ■ Options

- Effective Tilt Angle: 90° ~ 359.9°

#### ■ Handling Instruction

- Hall-IC sensor is impossible to measure resistance value as a variable resistor.
- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.