

Contactless Hall-IC Tilt Angle Sensor

MIDORI WR-7UHA



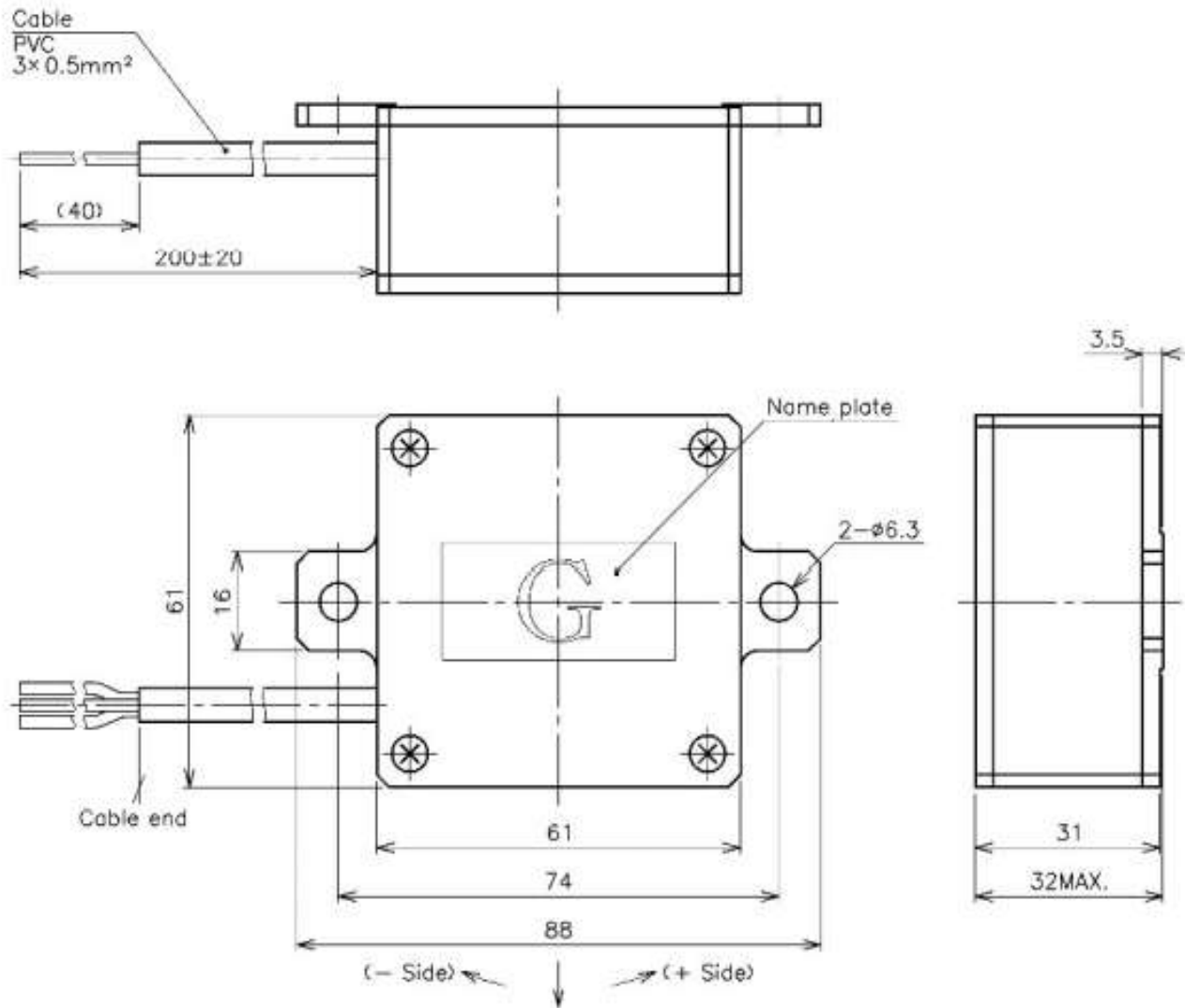
General

- Hall-IC Inclinator
 - Effective Electrical Tilt Angle: 120°
 - Absolute Linearity: $\pm 0.8\%FS$ (FS=120°)
 - High Environmental Performance
- IP64
- EMS 100V/m

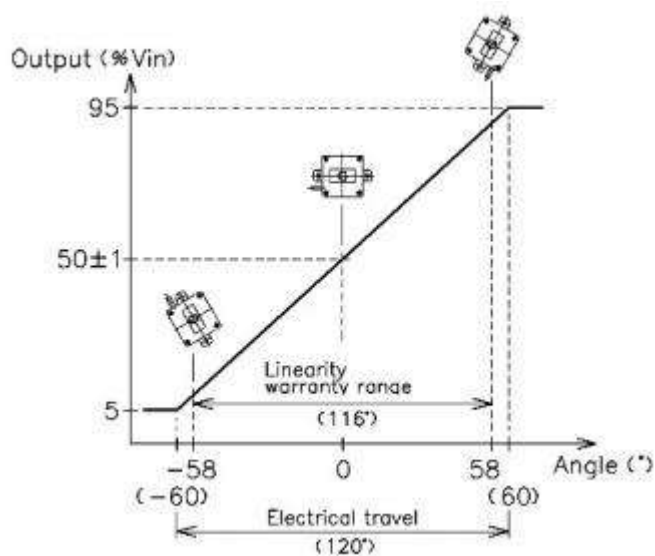
Material

- Housing: Aluminum

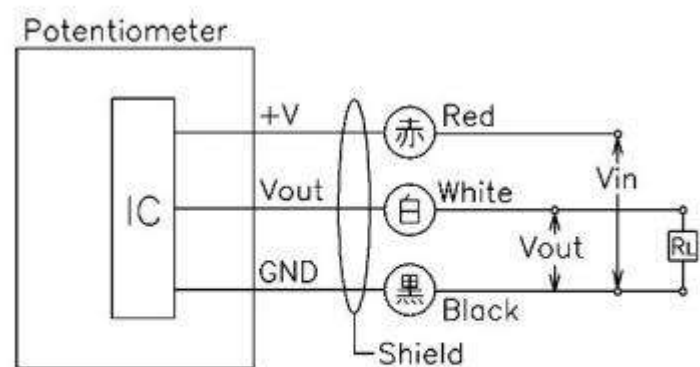
Dimension (mm)



Output Characteristics



Schematic



• Red, white and black indicate cable colors.

Specifications

WR-7UHA	
Electrical Specifications	
Effective Electrical Tilt Angle	±60°(=120°)
Index Point	50±1%Vin
Absolute Linearity	±0.8%FS (FS=120°)
Tilt Sensitivity	0.6°MAX. (0.5%FS MAX. FS=120°) including hysteresis
Input Voltage	DC5V±0.5V
Load Resistance (RL)	10KΩ MIN.
Supply Current	10mA MAX.
Output Range	5~95%Vin
Temp. Characteristics -30~80°C (Ref. Temp.+25°C)	±0.4% FS
Mechanical Specifications	
Total Mechanical Tilt Angle	360° Endless
Damping Time Constant	Approx.0.3sec/45°/25°C
Oil Viscosity	500mm ² /S
Mass	Approx. 260g
Environmental Specifications	
Operation Temperature	-30~+80°C
Storage Temperature	-40~+80°C
IP Level	IP64 (Except cable end)
Vibration	50m/S ² , 5~500Hz, 6min, 3axis 2hours (Room Temp.)
Shock	500m/S ² , 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°(±45°)~359.9°(±180°)

Handling Instruction

- Do not use Hall-IC sensor as a variable resistor.
- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.