

# Contactless MR-Element Angle Sensor

## MIDORI CP-2UKN-A Series



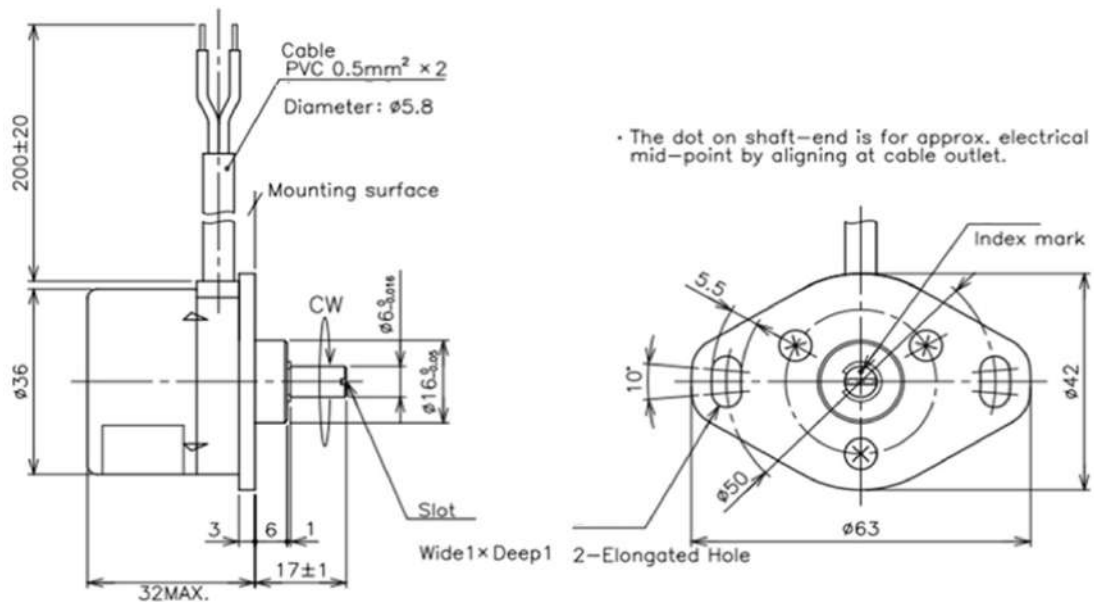
### General

- Single-turn MR-Element Angle Sensor
- Effective Electrical Travel: 90°
- Independent Linearity:  $\pm 2.2\%FS$
- Current Output: 4~20mA
- 2 Lead wires
- Removable mounting plate

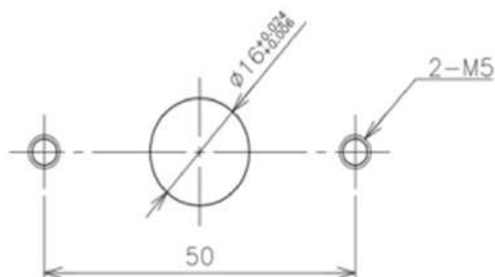
### Material

- Housing: Aluminum
- Shaft: Stainless Steel
- Ball Bearing: Stainless Steel
- Cover: Steel, Nickel Plate

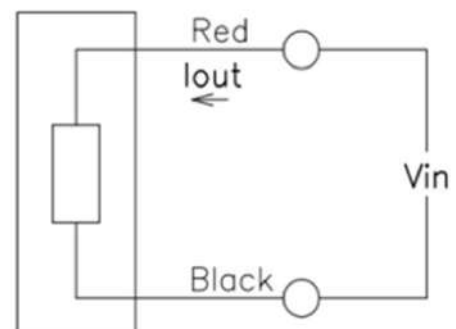
### Dimension (mm)



### Mounting(mm)

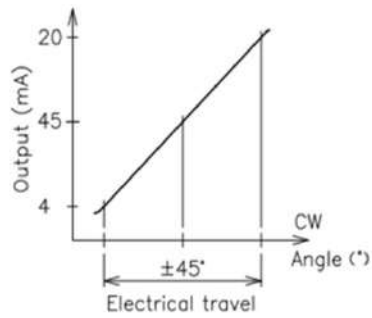


### Schematic



- Red and Black indicate harness colors.

# Output Characteristics



## Specifications

<b>CP-2UKN-A</b>	
<b>Electrical Specifications</b>	
Effective Electrical Travel	±45°
Output Range	4~20mA
Independent Linearity	±2.2%FS (FS=90°)
Input Voltage	DC24V±4V
Load Resistance	600Ω MAX. (at 24V/Vin)
Temp. Characteristics -20~+80°C (Reference Temp. 25°C)	@0° Position: ±1.4° @ ±45° Position: ±3°
<b>Mechanical Specifications</b>	
Total Mechanical Travel	360° Endless
Torque	2mN · m MAX.
Thrust Load Tolerance	4N
Radial Load Tolerance	14N
Weight	Approx. 80g
<b>Environmental Specifications</b>	
Life Cycle	50 Million Cycles MIN.
Category Temperature Range	-20~+80°C
Storage Temperature Range	-40~+100°C
Vibration	100m/S <sup>2</sup> 3axis 2hours each
Shock	1000m/S <sup>2</sup> 3axis 6directions 3times each
EMS	10V/m (IEC61000-4-3, Level 3)
ESD (Case to each Terminal)	±4KV (IEC)
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IP Level	IP54 (Except shaft side from mounting surface)

## Handling Instruction

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