

Contactless TMR-element Angle Sensor

# CP-16U Series

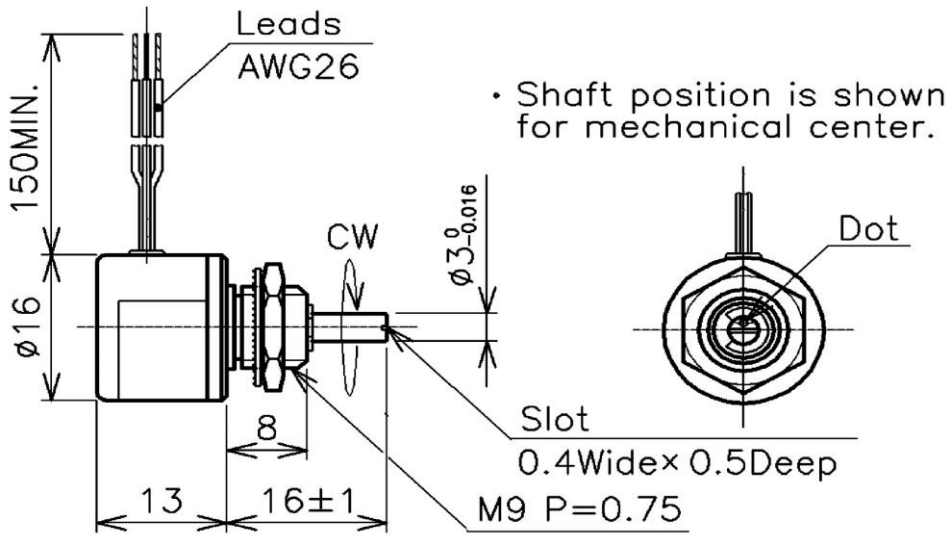


- Contactless TMR-element Angle Sensor
- Lower Current Consumption: 0.6mA MAX.
- Effective Electrical Angle: 90° (Option: 120°)
- Independent Linearity: ±1.5%FS
- Low Torque

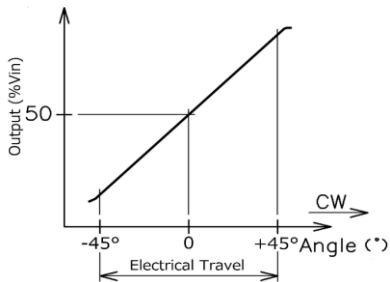
**[Material]**

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

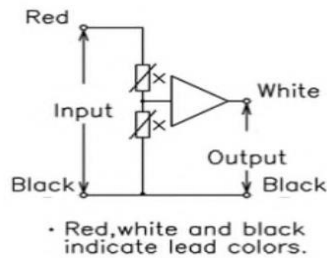
**■ Dimension (mm)**



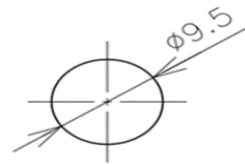
**■ Output Characteristics**



**■ Schematic**



**■ Mounting**



<b>[Model No.]</b>	<b>CP-16U</b>
--------------------	---------------

<b>Electrical Specifications</b>	
Effective Electrical Travel	±45°
Output Sensitivity	0.35~0.65%Vin/°
Independent Linearity	±1.5%FS
Input Voltage	DC3V~5.5V
Current Consumption	0.6mA MAX.
Load Resistance	100KΩ MIN.
Temp. Characteristics -30~+100°C (Reference Temp. 25°C)	@0° Position: ±0.9° @±45° Position: ±7°
Insulation Resistance	100MΩMIN./DC500V
Dielectric Strength	AC500V/1Minute

<b>Mechanical Specifications</b>	
Total Mechanical Travel	360° Endless
Torque	0.1mN · m MAX.
Thrust Load Tolerance	1N
Radial Load Tolerance	5N
Mass	Approx. 10g

<b>Environmental Specifications</b>	
Life Cycles	10 Million Cycles MIN.
Category Temperature Range	-30~+100°C
Storage Temperature Range	-40~+100°C
Vibration	200m/S <sup>2</sup> 5~500Hz(20min) 3axis 2hours each
Shock	1000m/S <sup>2</sup> 11ms 3axis 3times
EMS	25V/m 1MHz ~ 1GHz (IEC11452-2, -3)
ESD (Case to Each Terminal)	±4KV (IEC61000-4-2)
ESD (Each Terminal)	±8KV (IEC61000-4-2)

#### ■ Options

- Temperature Compensating Range: -20 ~ 80°C
- Effective Electrical Travel: 120°(Independent Linearity: ±2.5%FS)

#### ■ Accessories

M9 Nut

Internal Toothed Lock Washer      1 piece each

#### ■ 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.