

Contactless Angle Sensor

## CP-22H Multi-turn Series



- Contactless Angle Sensor (Multi-turns)
- Effective Electrical Angle :  $\pm 900^\circ$  -  $\pm 9000^\circ$
- Absolute Linearity :  $\pm 1\%$ FS
- IP Rating : IP67
- Output : Dual Output

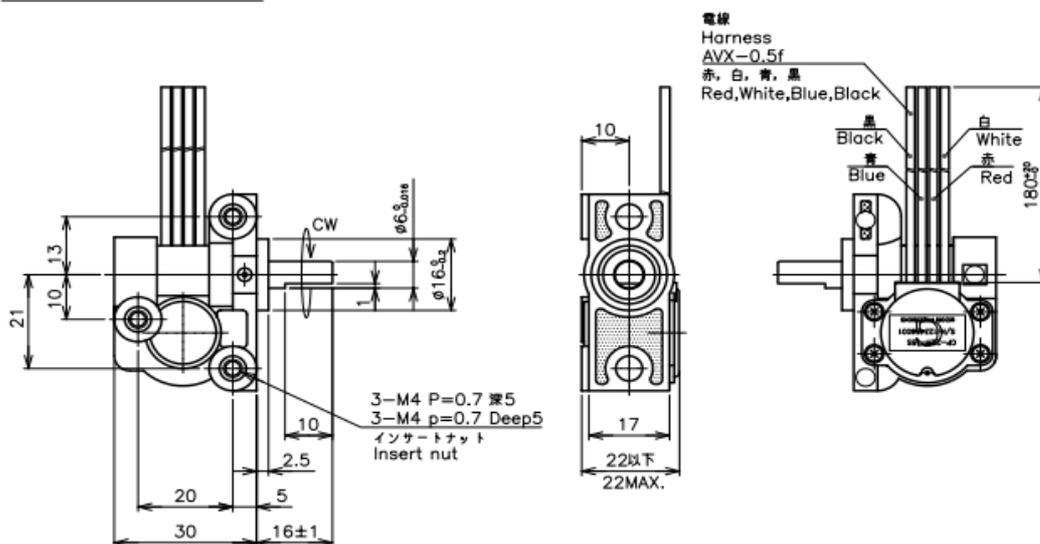
### 【Material】

- Housing : PBT
- Shaft : Stainless Steel
- Bearing : Stainless Steel

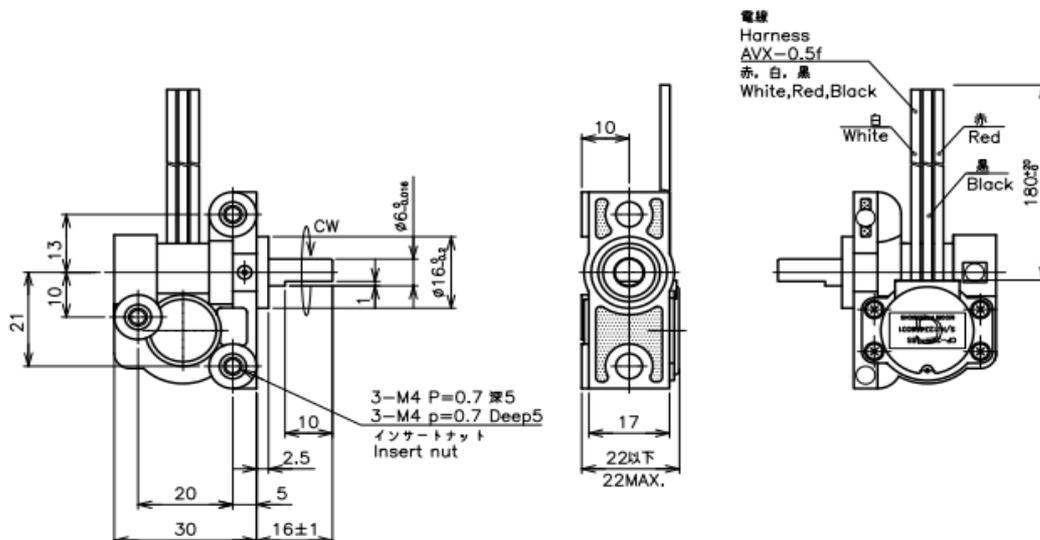
### Dimension

CP-22HC-xxS      xx=12,50

CP-22HP-xxS

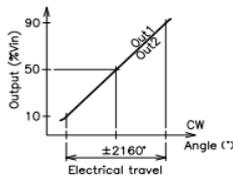


CP-22H-xxS

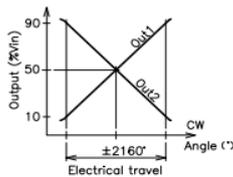


**Output Characteristics**

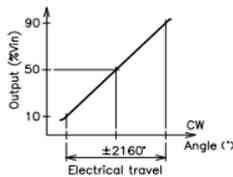
CP-22HP-12S



CP-22HC-12S

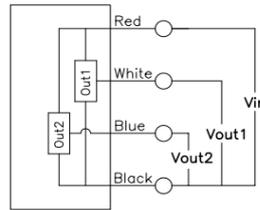


CP-22H-12S



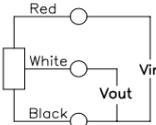
**Schematic**

CP-22HC-12S  
CP-22HP-12S



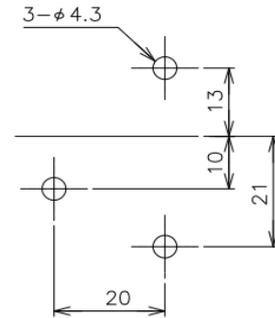
• Red,White,Blue,Black indicate lead colors.

CP-22H-12S



• Red,White,Black indicate lead colors.

**Mounting**



【Model No.】	CP-22HP-12S	CP-22HC-12S	CP-22H-12S	CP-22HP-50S	CP-22HC-50S	CP-22H-50S
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**【Electrical Data】**

Effective Electrical Travel	4320		18000		°	
Output Range			10~90		%Vin	
Absolute Linearity			±1		%FS	
Input Voltage			DC5±0.5		V	
Load Resistance			10~150		kΩ	
Supply Current			MAX.16(CP-22H-xxS) / MAX.32(CP-22HC-xxS,CP-22HP-xxS)		mA	
Insulation Resistance			MIN. 100/DC50		MΩ	
Resolution			12(0~100%Vin)		bit	
Response time			0.9 MAX.		ms	
Hysteresis			MAX. 0.5		%FS	
Temp. Characteristics -40~100°C(Reference)	MAX. ±27		MAX. ±112.5		°	
2 Output Error	Difference:±1	Sum:100±1	-	Difference:±1	Sum:100±1	%Vin

**【Mechanical Data】**

Total Mechanical Travel	360 Endless		°
Torque	MAX.4		mN·m
Thrust Load Tolera	4		N
Radial Load Tolera	4		N
Mass	46 Approx.		g

**【Environmental Data】**

Life Cycles	10 Million(Room Temp., No Load, cw/ccw)		Cycle
Operating Temp.	-40~+100 (No condensation)		°C
Storage Temperature Range	-50~+100 (No condensation)		°C
Vibration	5~500Hz(6min) 200m/s <sup>2</sup> (20G) 3directions 2hours each		
Shock	1000m/s <sup>2</sup> (100G) 6directions 3times		
EMS	100V/m 15k~1GHz (ISO 11452)		
ESD(Case-Each Terminal)	MAX.±25kV(IEC 61000-4-2)		
ESD(Each Terminal)	MAX.±12kV(IEC 61000-4-2)		
IP Rating	IP54		

<b>【Model No.】</b>	CP-22HSP-12S	CP-22HSC-12S	CP-22HS-12S	CP-22HSP-50S	CP-22HSC-50S	CP-22HS-50S
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**【Mechanical Data】**

Torque	MAX.25	mN·m
Mass	46 Approx.	g

**【Environmental Data】**

IP Rating	IP67
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※Other specifications are the same as without seal.

**■ Handling Instruction**

- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.