

Contactless Hall-IC Angle Sensor

MIDORI CP-22H Gear Head Series



General

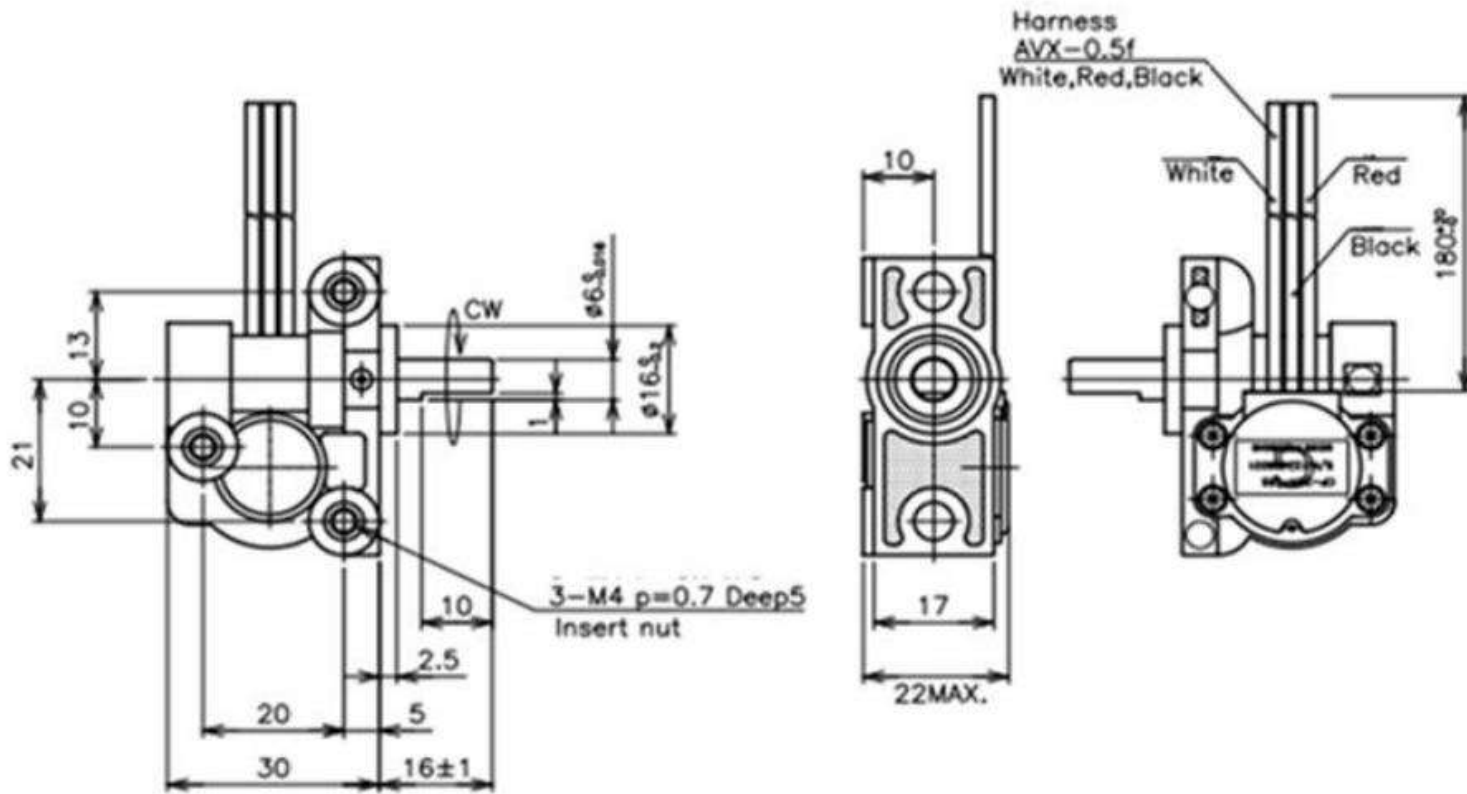
- Contactless Hall-IC Multi-Turn Angle Sensor
- Effective Electrical Angle: 1800°~21600°
- Absolute Linearity: $\pm 1\%FS$

Material

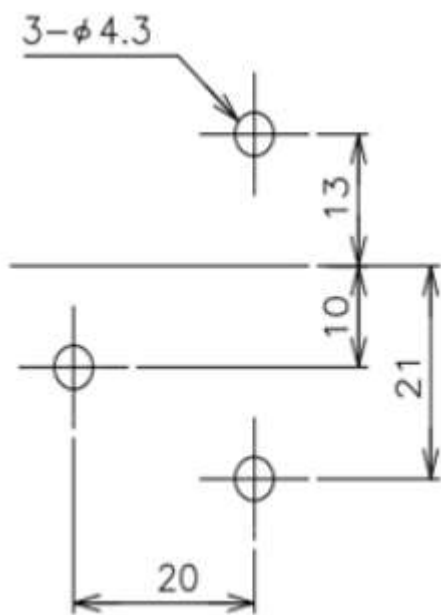
- Housing: PBT
- Shaft: Stainless Steel
- Bearing: Stainless Steel

Dimension (mm)

CP-22H-xxS (Single Output)

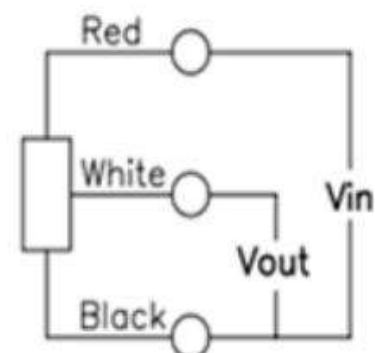


Mounting(mm)



Schematic

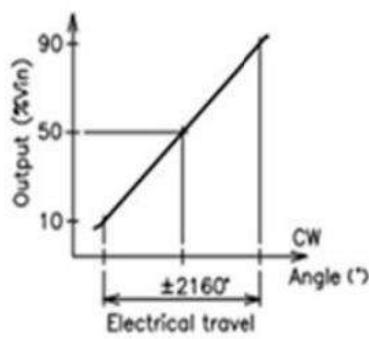
Single Output



- Red,White,Black indicate lead colors.

Output Characteristics

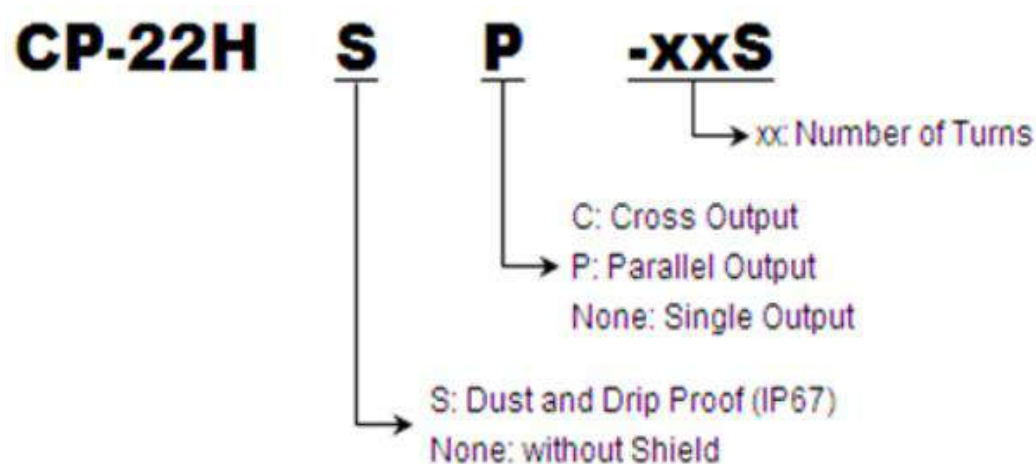
CP-22H-12S (Single Output)



Specifications

	5-Turn	12-Turn	30-Turn	50-Turn	60-Turn
	CP-22H-5S	CP-22H-12S	CP-22H-30S	CP-22H-50S	CP-22H-60S
Electrical Specifications					
Effective Electrical Travel	1800°	4320°	10800°	18000°	21600°
Absolute Linearity			±1%FS		
Output Range			10%~90%Vin		
Input Voltage			DC5V±0.5V		
Load Resistance			10~150KΩ MIN.		
Insulation Resistance			100MΩ/ DC50V MIN.		
Output Resolution			12bit (0~100%Vin)		
Response Time			0.9ms MAX.		
Hysteresis			0.5%FS MAX.		
Temp. Characteristics -40~+85°C (Reference Temp. 25°C)	± 11.25° MAX.	± 27° MAX.	± 67.5° MAX.	± 112.5° MAX.	± 135° MAX.
Mechanical Specifications					
Total Mechanical Travel			360° Endless		
Torque			4mN · m MAX.		
Thrust Load Tolerance			4N		
Radial Load Tolerance			4N		
Weight			Approx. 46g		
Environmental Specifications					
Life Cycles			10M Cycles MIN. (Room Temp., No-load, Rotational direction CW/CCW)		
Operation Temp. Range			-40~+100°C (No condensation)		
Storage Temp. Range			-50~+100°C (No condensation)		
Vibration			5~500Hz (6min) 200m/S ² (20G) 3directions 2hours each		
Shock			1000m/S ² (100G) 6 directions 2hours each		
EMS			100V/m 15K~1GHz (ISO 11452)		
ESD (Case to each Terminal)			±25KV MAX. (IEC61000-4-2)		
ESD (b/t each Terminal)			±12KV MAX. (IEC61000-4-2)		
IP Level			IP 54		

Model Number Designation



Handling Instruction

- This product will be locked a shaft at 50% output position with a stopper before shipping.
- 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.
- When the shaft is coupled, please do not apply heavy load to the shaft.