

Contactless Hall-IC Angle Sensor

CP-20H Series

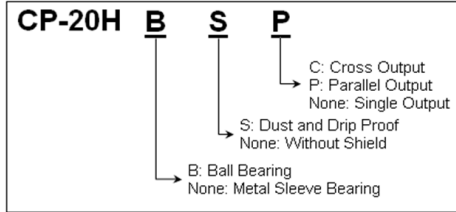


- Contactless Hall-IC Angle Sensor
- Effective Electrical Travel : 340°(Standard), 270°, 300°, 359°
- Absolute Linearity : ±1%
- Bushing Mount
- Available with $\Phi 3.175$ mm Shaft

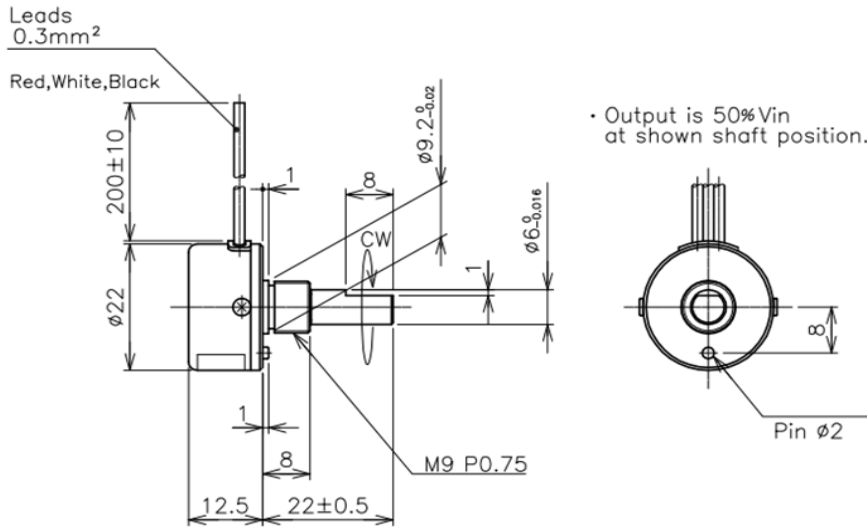
[Material]

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

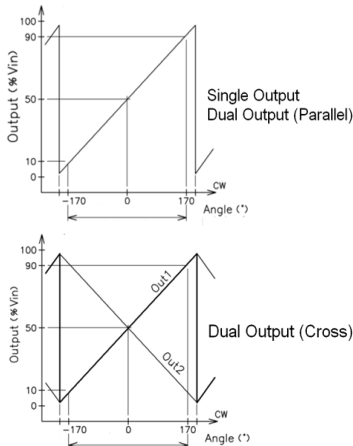
CP-20H Model Number Designation



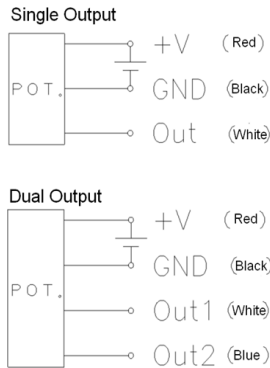
Dimension (mm)



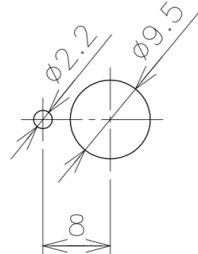
Output Characteristics



Schematic



Mounting



【Model No.】	Single Output				Dual Output		P=Parallel, C=Cross	
	CP-20H	CP-20HS	CP-20HB	CP-20HBS	CP-20HP	CP-20HSP	CP-20HBP	CP-20HBSP
					CP-20HC	CP-20HSC	CP-20HBC	CP-20HBSC

Electrical Specifications

Effective Electrical Travel	Standard: $\pm 170^\circ$ (=340°) Option: 270°, 300°, 359°	
Output Range	10%~90%Vin	
Absolute Linearity	$\pm 1\%$ FS (FS=360°)	
Input Voltage	DC5V ± 0.5 V	
Load Resistance	10K Ω MIN.	
Supply Current	16mA MAX.	32mA MAX.
Insulation Resistance	100M Ω /DC50V MIN.	
Output Resolution	12bit (0~100%Vin)	
Hysteresis	0.3%FS	
Temp. Characteristics -30~+100°C	$\pm 1.7^\circ$ (Reference Temp. 25°C)	
2 Output Difference	---	$\pm 1\%$ Vin
		100%Vin $\pm 1\%$ (Sum Output 1 and 2)

Mechanical Specifications

Total Mechanical Travel	360° Endless							
Torque	2mN · m MAX.	100mN · mMAX.	2mN · m MAX.	100mN · mMAX.	2mN · m MAX.	100mN · mMAX.	2mN · m MAX.	100mN · mMAX.
Thrust Load Tolerance	2 N							
Radial Load Tolerance	5N							
Mass	Approx. 20g							

Environmental Specifications

Life Cycles	10 Million Cycle							
Category Temperature Range	-30~+100°C							
Storage Temperature Range	-30~+100°C							
Vibration	200mm ² /S, 5-500Hz, 6minutes, 3axis, 3times (Room Temp.)							
Shock	1000mm ² /S, 6ms, 3axis, 3times (Room Temp.)							
EMS	100V/m 200MHz-1GHz (ISO 11452-2)							
ESD (Case to Each Terminal)	± 16 kV MAX. (IEC 61000-4-2)							
ESD (Between Each Terminal)	± 8 kV MAX. (IEC 61000-4-2)							
IP Level	IP50	IP60*	IP50	IP60*	IP50	IP60*	IP50	IP60*

* Mounting surface side only

■ 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.