

모 델: SME360CP-05-X 데 이 터 슈 트
(Contactless)



<http://www.sera.kr>

[Product View & Model]



PCB Type

SME360CP-05-X(옵션)

X=P (PWM)

X=A (ANALOG)

[Features]

- 고 정밀 회전 각 및 포지션 측정.
- 자기검출 방식 엡솔루트 형 로타리엔코더 .
- 다양한 인터페이스(PWM / Analog)
- 제로 위치 표시장치(Marking)
- Contactless 방식의 반 영구적 수명.
- AL 재질의 견고한 Housing.
- Stainless Steel Shaft
- Stainless Steel 2Ball Bearing

[Specifications]

항목	사양	단위	참조1	참조2
사용전압	+5±0.5	V	Voltage	
소비전류	≒10	mA	Ampere	
출력모드	1)Digital	Puls		
	2)Analog	V		1/2Position=2.5V
출력해상도	Max 12	Bit	PWM	
측정 범위	0~360(±180)	°	연속 측정	
측정회전 수	Max 5,000	rpm	ANA/PWM	
직선 성	0.1 <	%	FS	Analog
응답시간	50 <	us		
Hysteresis	0.1 <	%	FS	
부하저항	10K >	Ω		

[Specifications]

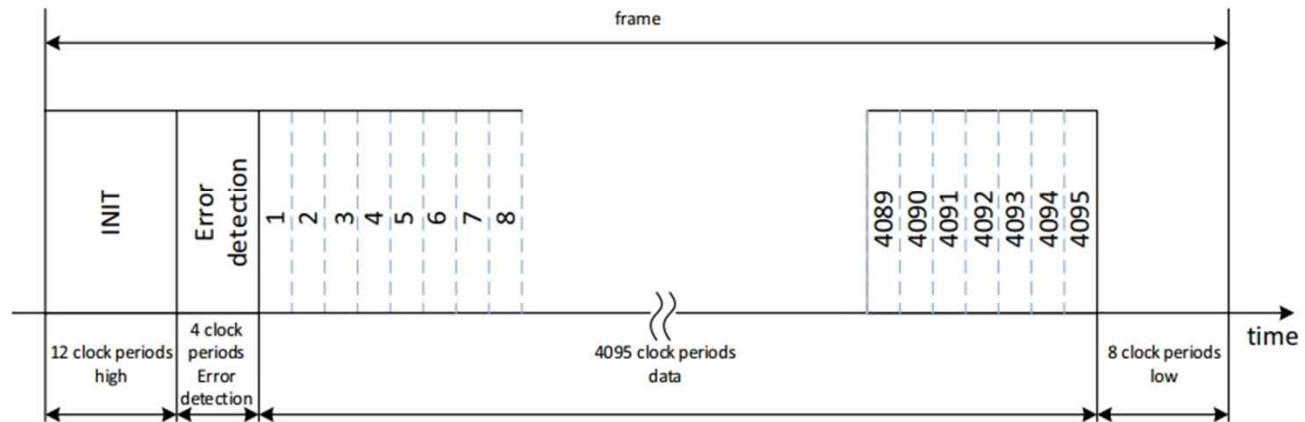
Environmental

항목	사양	단위	참조1	참조2
동작 온도	-20~+100	°C		
보관온도	-40~+150	°C		
무 게	≒10	g		
수 명	10	Lfs	million	
축 하중(정지/회전)	Cr=8 / Cor=3	kgf	V	
진동특성	200mm²/s, 5-500hz, 5minutes, 3axis, 5times			
충격특성	1,000mm²/s, 10ms, 3axis, 5times			
E M S	100V/m 200Mhz-1Ghz(ISO11452-2)			
E S D	MAX±16(IEC61000-4-2)—Housing to Terminal			
방수등급	IP65			
재 질	Housing: AL , Shaft: Stainless Steel			

[Application]

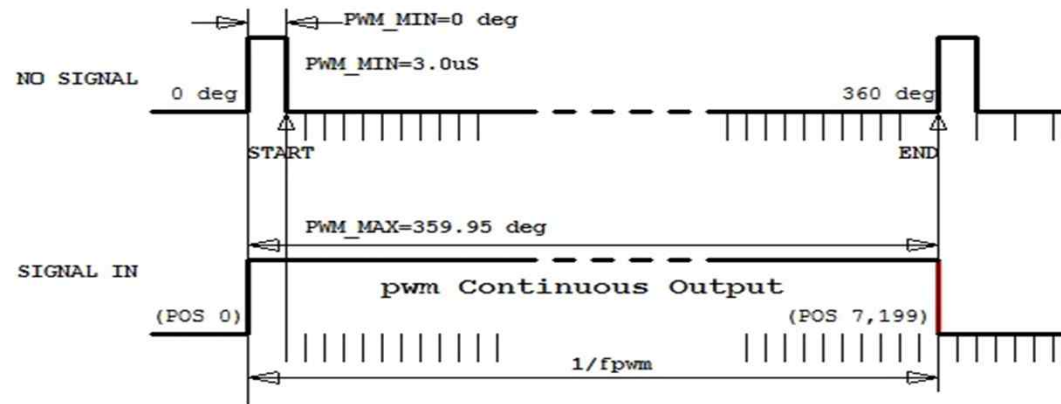
- 로봇(Robot)
- 모터(Motor)
- 기울기 센서(Tilt Sensor)
- 자이로 스코프(Gyroscopes)
- 장난감(Toy)
- 자동차(Automobile)
- 건설(Construction)
- 기계(Machine)
- 선박(Ship)
- 의료(Medical)
- 기타

[PWM Signal 12bit Resolution]

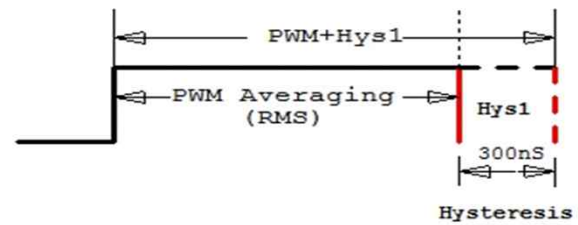


[PWM Outputs Signal Division Chart]

[PWM Output Specificity(POS)]

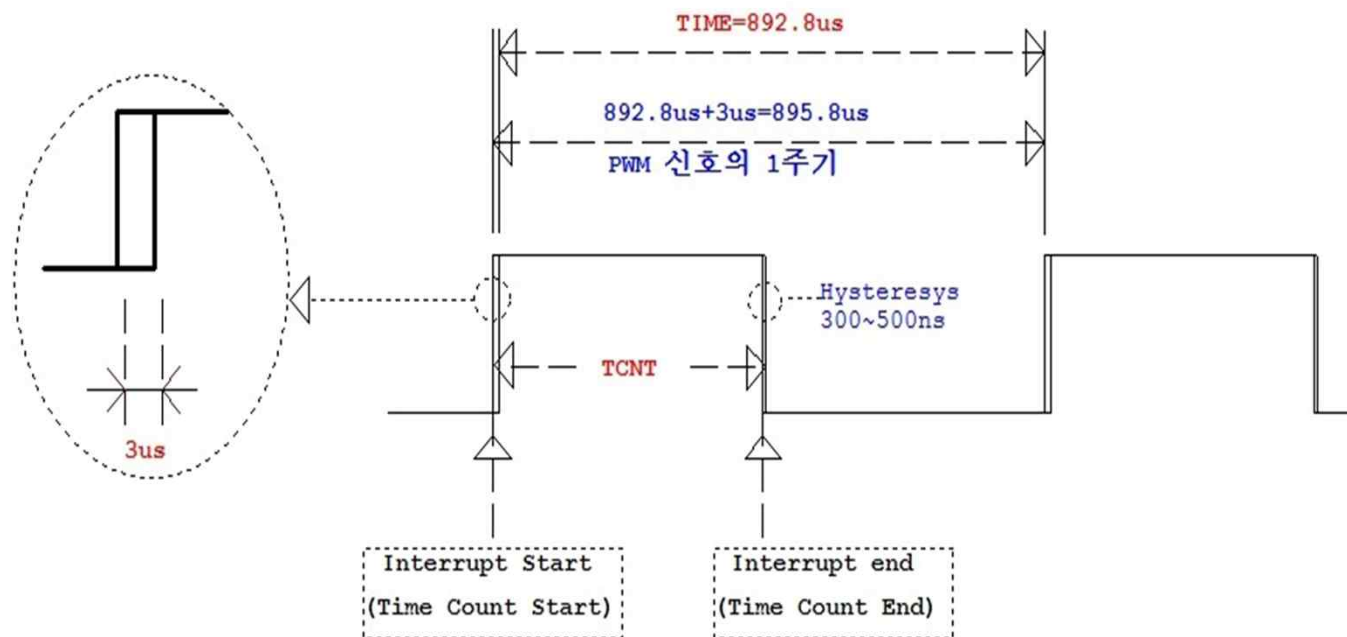


[PWM Output Hysteresis]



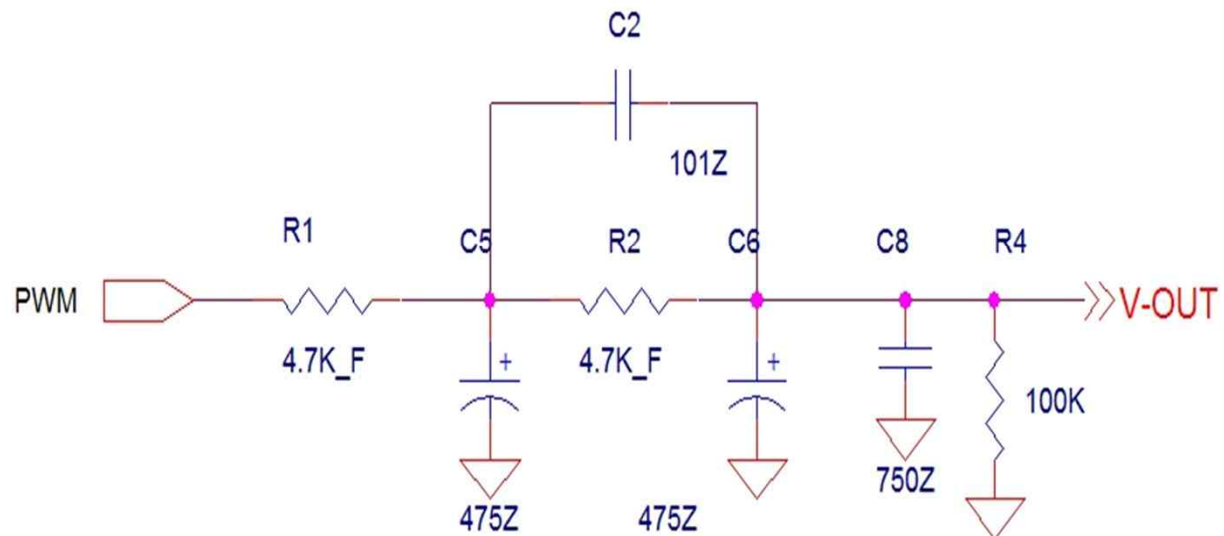
[PWM Outputs Timing Chart (Program Reference)]

$$\text{측정 각도값} = ((\text{TIME} - (\text{TCNT} - 3)) / \text{TIME}) * 360 - 360$$

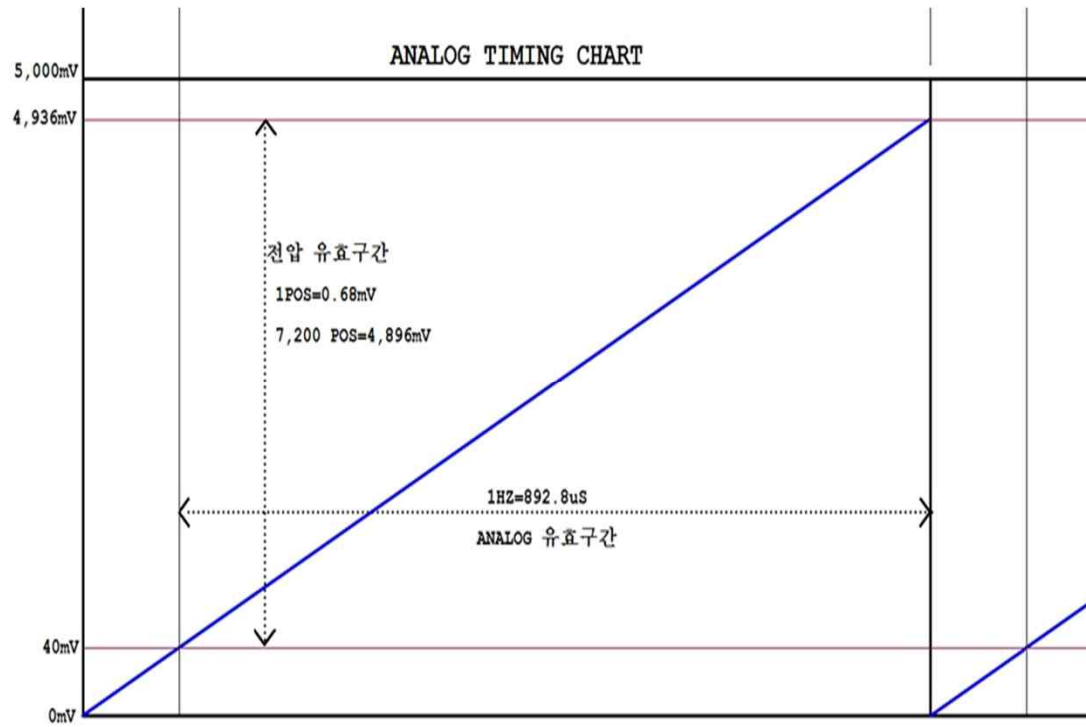


[PWM-Analog Converter]

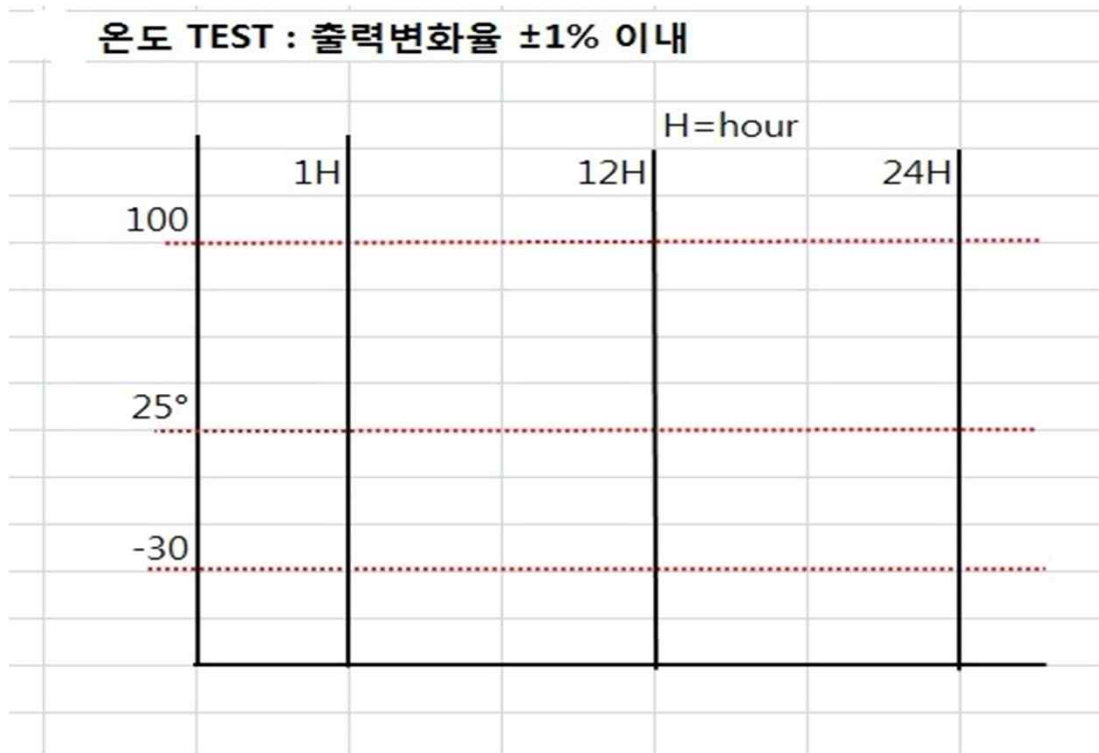
A-SCHEMATIC



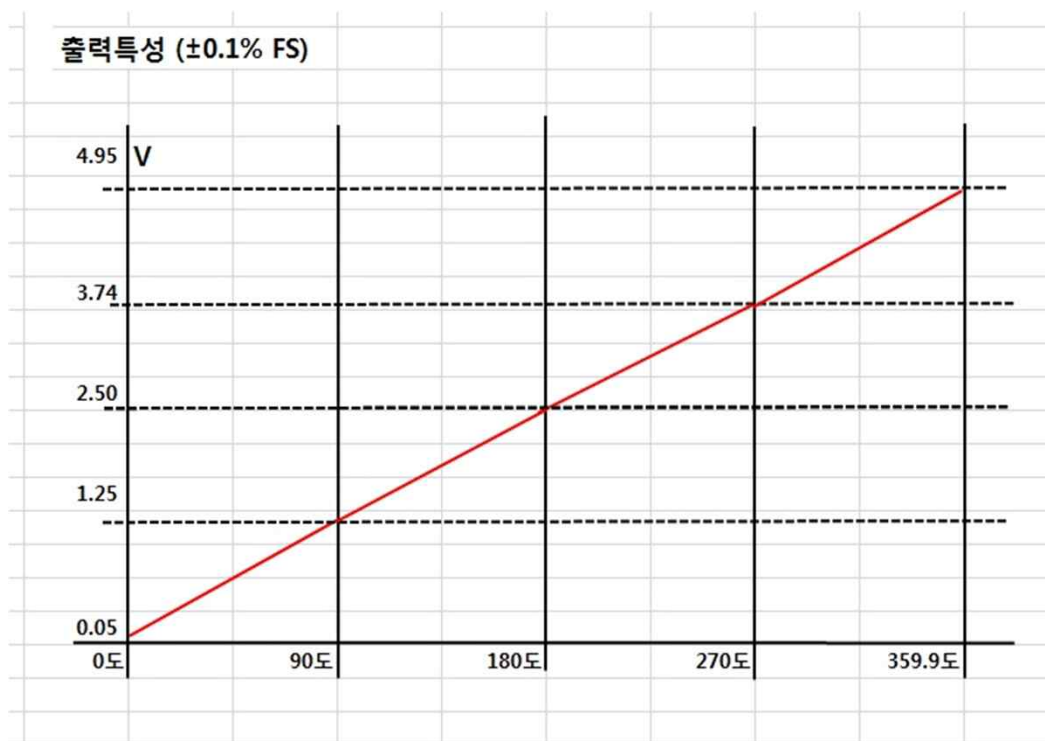
[Analog Outputs Timing Chart]



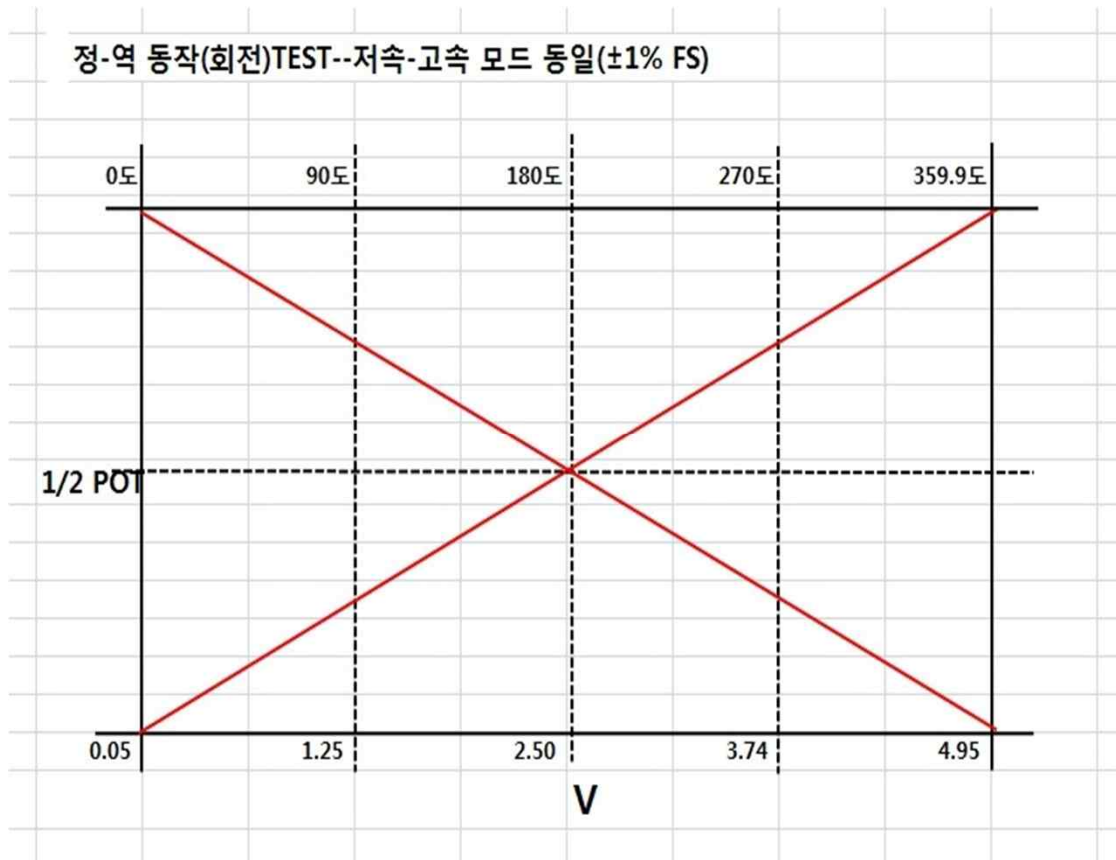
[Analog Output characteristic]-Temperature



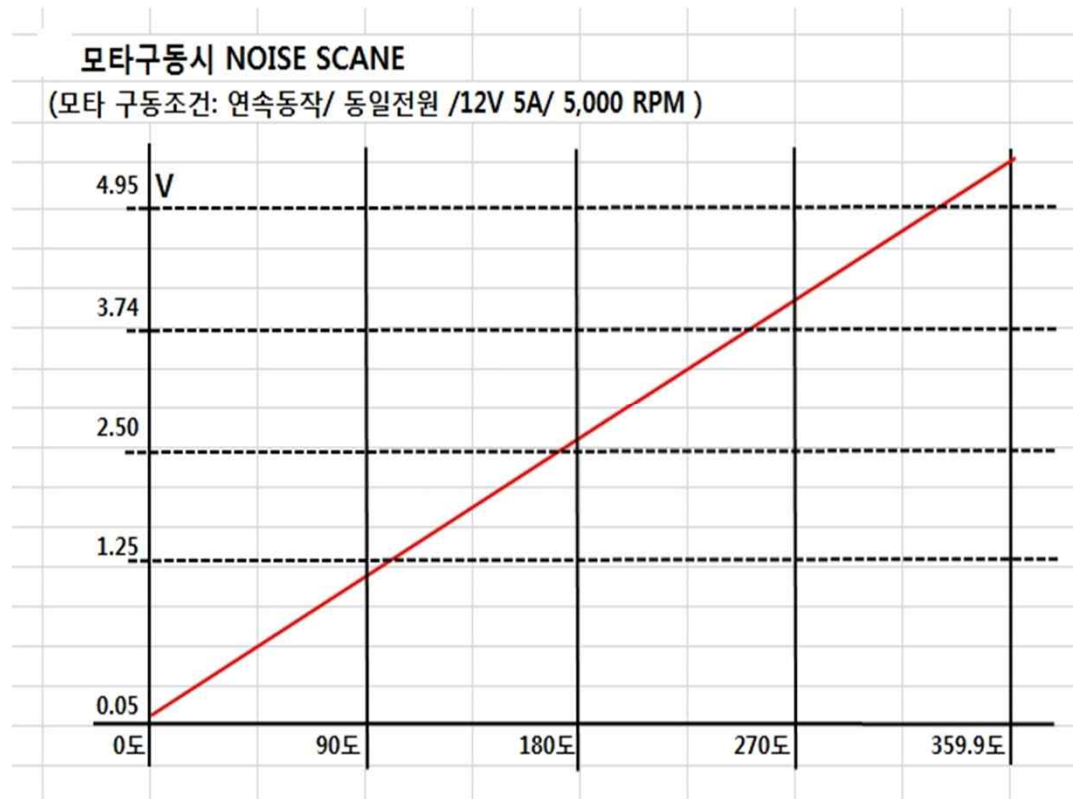
[Analog Output characteristic]-Analog



[Analog Output characteristic]-Forward-Reverse

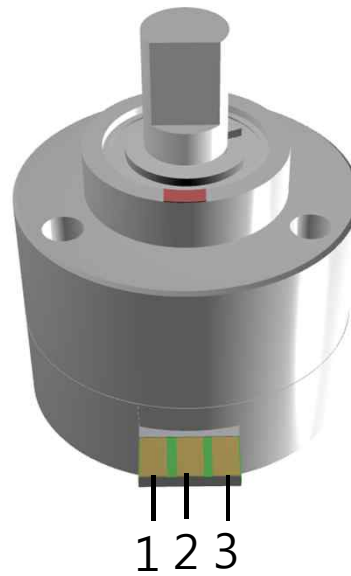


[Analog Output characteristic]-Noise Scan



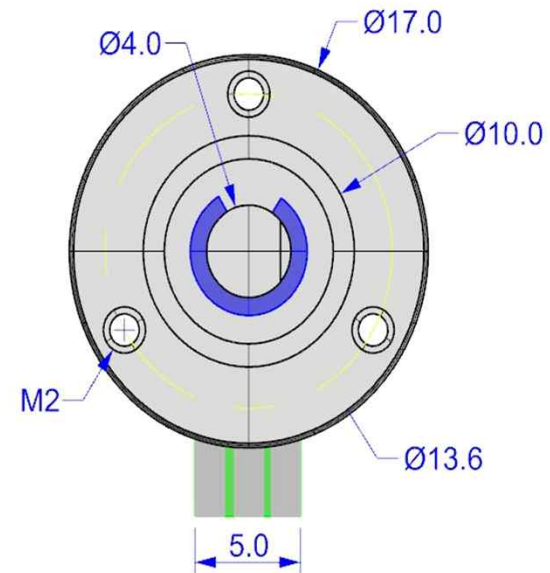
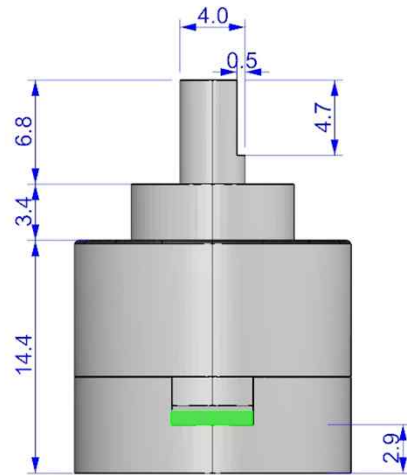
[Pin Assignment]

SME360CP-05-X



- 1) VCC(5.0V \pm 0.5V)
- 2) ANALOG / PWM OUT
- 3) GND

[Dimension]



[Coupling Device]

