

Contactless Hall-IC Tilt Angle Sensor

PMP-SHT Series

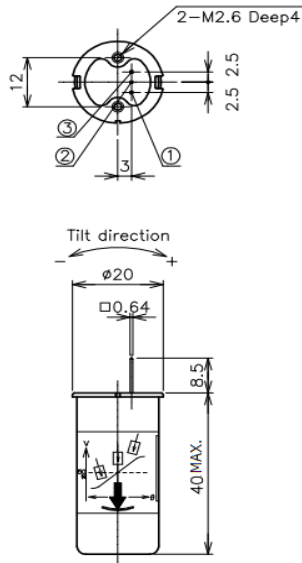


- Single Axis Tilt Angle Sensor
- Effective Electrical Tilt Angle :
 - ±5° (PMP-S5HT)
 - ±10° (PMP-S10HT Standard)
 - ±20° (PMP-S20HT)
 - ±30° (PMP-S30HT)
- Center Based Linearity : ±1%FS

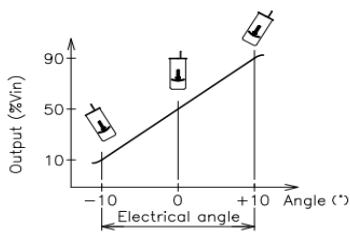
【Material】

- Housing : Zinc, Nickel Plate
- Cover : Steel, Nickel Plate

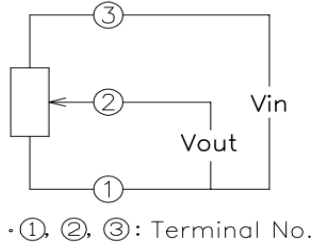
■ Dimension (mm)



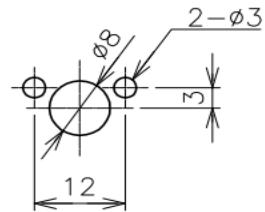
■ Output Characteristics



■ Schematic



■ Mounting



【Model No.】	PMP-S10HT	PMP-S5HT	PMP-S20HT	PMP-S30HT
-------------	-----------	----------	-----------	-----------

Electrical Specifications

Effective Electrical Tilt Angle	±10°	±5°	±20°	±30°
Tilt Sensitivity	0.02° MAX.	0.01° MAX.	0.04° MAX.	0.06° MAX.
Output Range	10%~90%Vin			
Output Sensitivity	1.05(~1.75)%Vin/°			
Index Point	50%±3%Vin	50%±6%Vin	50%±2%Vin	50%±2%Vin
Center Based Linearity	±1%FS	±1%FS	±1%FS	±1.5%FS
Input Voltage	DC5V±0.5V			
Load Resistance	10KΩ MIN.			
Supply Current	10mA MAX.			
Insulation Resistance	100MΩ/ DC50V MIN.			
Temp. Characteristics -20℃~80℃ (Reference Temp. 25℃)	At 0° : 1.0° At ±10° : 1.5°	At 0° : 1.0° At ±5° : 1.5°	At 0° : 2.5° At ±20° : 2.5°	At 0° : 2.5° At ±10° : 3.0°

Mechanical Specifications

Response Time	Approx. 0.3 Sec.(Damper Oil 200mm ² /S)			
Total Mechanical Tilt Angle	±12° MIN.	±24° MIN.	±24° MIN.	±36° MIN.
Mass	Approx. 35g			

Environmental Specifications

Category Temperature Range	-20~+80℃			
Storage Temperature Range	-40~+80℃			
Vibration	70m/S ² 3axis 2hours			
Shock	1000m/S ² 6direction 3times			
EMS	100V/m 200M~1GHz			
ESD (Case to Each Terminal)	±4KV			
ESD (Between Each Terminal)	±4KV			
IP Level	IP65 (Without Terminals)			

■ 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.
- To avoid the spring pendulum bending, do not lay this unit on its side.