

RoHS Compliance

PMP-S10HT

FEATURES

- Contactless inclination sensor for $\pm 10^\circ$ angle, using Hall effect IC.
- Compact and low cost.
- Long useful life

Electrical Specifications

Electrical Tilt Angle	$\pm 10^\circ$
Tilt Sensitivity	0.02° MAX.
Output Range	10 ~ 90% V_{in}
Index Point	$50 \pm 1\% V_{in}$
Zero-Based Lin.	$\pm 1\% FS^*$
Input Voltage	DC5 $\pm 0.5V$
Load Resistance	10k MIN.
Supply Current	10mA MAX.
Insulation Resistance	DC50V 100M MIN.
Temp. Characteristics (-20°C ~ 80°C)	0 °Position $\pm 1^\circ$
Based Temp. 25°C	$\pm 10^\circ$ Position $\pm 1.5^\circ$

*over $\pm 20^\circ$ angle, linearity is 1.5 °FS

Mechanical Specifications

Mechanical Angle	$\pm 12^\circ$ MIN.
Response Time	Approx. 0.3 sec.(Damper Oil 200cst)
Weight	Approx. 35g

Environmental Specifications

Vibration	70m/s ² 3axis 2hours
Shock	1,000m/s ² 6axis 3times
EMS	100V/m, 200M ~ 1GHz
Operating Temp.	-20 ~ 80
Storage Temp.	-40 ~ 80
ESD(Case - Each Terminal)	$\pm 4kV$
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IP Level	IP65(without Terminals)

OPTIONS

- Electrical tilt angle: $\pm 5^\circ$; $\pm 20^\circ$; $\pm 30^\circ$

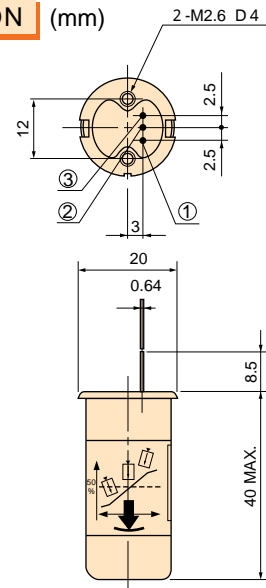
Temp. Characteristics of special Elect. angle

Elect. angle	PMP-S5HT	PMP-S20HT	PMP-S30HT
At 0°	1.0°	2.5°	2.5°
At $\pm X^\circ$	1.5°	2.5°	3.0°

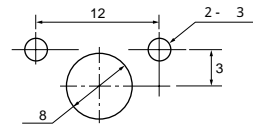
X \approx max. tilt angle

Temp. Range : -20 ~ 80°C(Ref. Temp.25°C)

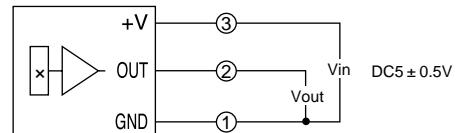
DIMENSION (mm)



MOUNTING

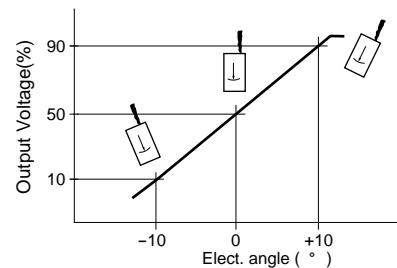


SCHEMATIC



• 1,2,3 indicate Terminal No.

OUTPUT CHARACTERISTICS



HANDLING INSTRUCTION

- This product may be damaged by extreme shock such as dropping on the floor and storing sideways.
- This product may be influenced from external magnetic field of apparatus which generates a magnetic field.
- Use this sensor in the place where is protected from ESD.
- Silicom damper oil is filled in the housing.
- Response time is step response time at room temperature.