

Contactless Hall-IC Tilt Angle Sensor

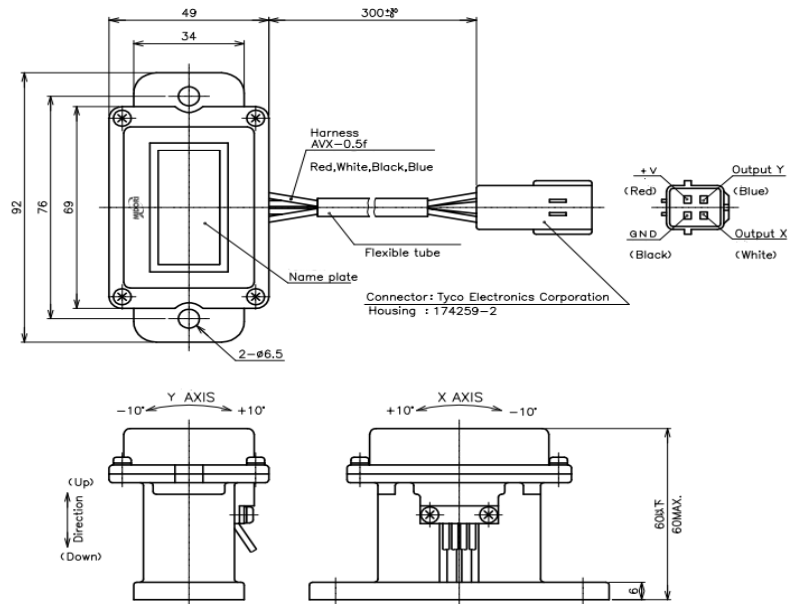
PMP-HTL Series



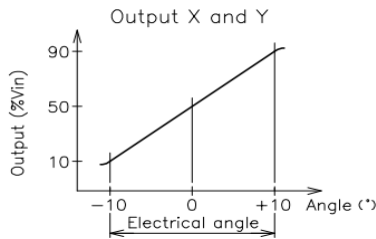
- Contactless Single / Dual Axis Tilt Angle Sensor
 - Single Axis (X-axis ONLY) : **PMP-xxHTL**
 - Dual Axis : **PMP-xxHTZL**
- Effective Electrical Tilt Angle :
 - ±5° (PMP-5HTL / 5HTZL)
 - ±10° (PMP-10HTL / 10HTZL)
 - ±20° (PMP-20HTL / 20HTZL)
 - ±30° (PMP-30HTL / 30HTZL)
- Center Based Linearity : ±1%FS (X,Y axis)

【Material】
 ● Housing : Aluminum

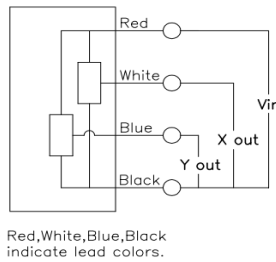
■ Dimension (mm)



■ Output Characteristics



■ Schematic



■ Mounting



[Model No.]	PMP-10HTL PMP-10HTZL	PMP-5HTL PMP-5HTZL	PMP-20HTL PMP-20HTZL	PMP-30HTL PMP-30HTZL	
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Electrical Specifications	(X and Y axis)				
Effective Electrical Tilt Angle	±10°	±5°	±20°	±30°	
Output Range	10%~90%Vin				
Index Point	50±4%Vin	50±8%Vin	50±3%Vin		
Center Based Linearity	±1%FS	±1%FS	±1%FS	±1.5%FS	
Input Voltage	DC5V±0.5V				
Load Resistance	10KΩ MIN.				
Supply Current	20mA MAX.				
Insulation Resistance	100MΩ/ DC50V MIN.				
Temp. Characteristics -20°C~80°C (Reference Temp. 25°C)	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. 0.5 Sec.(Damper Oil 200mm ² /S)				
Total Mechanical Tilt Angle	±12° MIN.	±6° MIN.	±24° MIN.	±36° MIN.	
Mass	Approx. 230g				

Environmental Specifications					
Category Temperature Range	-20~+80°C				
Storage Temperature Range	-40~+80°C				
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)				

■ Options

- Different effective electrical tilt angle between X and Y axis (ex. X-axis:±5°, Y-axis:±10°)
- Other damper oil viscosity
- Narrower output voltage range

■ 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.