Dual axis automatic level control switch

General Description

LVT128T is a horizontal automatic switch developed by Chuncao Technology Company, which is professionally used in elevators, industrial automation, and horizontal safety alarms.Automatic adjustment with the platform and related industries. The user sets the alarm angle threshold by himself, and the measurement range is ±90°. When the measured inclination angle is greater than the alarm threshold When the value is set, the output line becomes closed (also can be disconnected) when the sensor exceeds the safe inclination value, it will output a non-edge contact relay signal (Drive current 1A), you can open the electronic valve to control the corresponding hydraulic outrigger leveling. Exquisite product design, integrated surge, etc.Comprehensive protection function, suitable for various harsh industrial environments. MEMS technology is also used in product reliability and stability, Small product size, high consistency and stability are the core components of industrial automation.

Specifications

Single and double optional four-way tilt measurement　　　　RS232 serial port output
power-off save function　　　　Resolution 0.001°　　　　9-36V wide voltage input
Relay output (normally open, normally closed optional)
Anti-vibration performance: >2000g　　　　Wide temperature working: -40°C ~ +85°C
Store temperature : -55°C~+100°C
Zero temperature drift (-40 ° C ~ 85 ° C): ± 0.005 °

Applications

1: Industrial automatic leveling　　　　　　2: Medical equipment
3: Solar automatic tracking　　　　　　　　4: Tower tilt monitoring
5: Lifting angle control of cranes　　　　　　6: Structural deformation monitoring
7: Measuring and mapping instruments　　　8: Military equipment automation

Electrical parameters

Parameters	conditions	Min	Standard	Max	Unit
power supply		5	12 24	36	V
Working current		15	30	40	mA
Working temperature		-40		+85	℃
Store temperature		-55		+100	℃

Technical Data

Parameters	performance
Measuring range	±90°
Measuring axis	±X,±Y
Resolution	0.08°
Absolute accuracy	0.001°
Zero temperature coefficient	0.02°
Power on time	<3S
Output frequency	10-100HZ
Baud rate	4800-115200
Impact resistance	2000g.0.5ms、3Times/Axis(half sinusoid)
Average no reason Obstacle time MTBF	≥80000h
Insulation resistance	≥100MΩ
Output signal	RS232/RSS85
Weight	200g (aviation plug, standard wiring length 1.2 meters)

Key words

Resolution：Refers to the sensor in measuring range to detect and identify the smallest changed value.

Absolute accuracy：Refers to in the normal temperature circumstances,the sensor absolute linearity, repeatability, hysteresis, zero deviation, and transverse error comprehensive error.

Response time：Refers to the sensor in an angle change, the sensoroutput value reached the standardtime required.。

Mechanical Parameters

Connectors	1.2m lead cable（standard）
Protection glass	IP67
Enclosure material	Aluminum Oxide
Installation	4*M4 screws

Electrical Connection

| Line	RED	BLACK	YELLOW	BLUE	Brown	GRAY
color function	DC 9V~36V Power positive	GND Power Negative	RS232(RXD) RS485(D+)	RS232(TXD) RS485(D-)	+Y OUT	-Y OUT

Production installation notes:

Please follow the correct way to install tilt sensor, incorrect installation can cause measurement errors, with particular attention to the "surface", "line": :

1) The Sensor mounting surface and the measured surface must be fixed closely, smoothly, stability,ifmounting surface uneven likely to cause the sensor to measure the angle error. See Figure Pic.AB

2) The sensor axis and the measured axis must be parallel ,the two axes do not produce the angle as much as possible. See Figure Pic.CD :
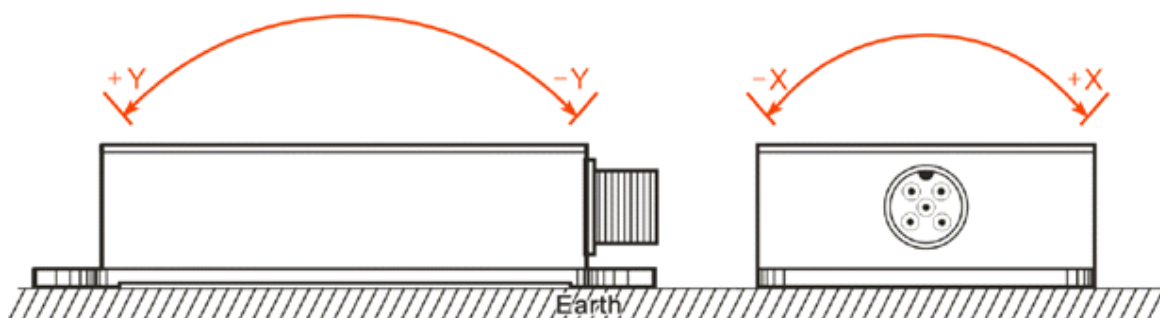
The axis of the sensor must be parallel to the axis to be measured, and the two axes should not be angled as much as possible.
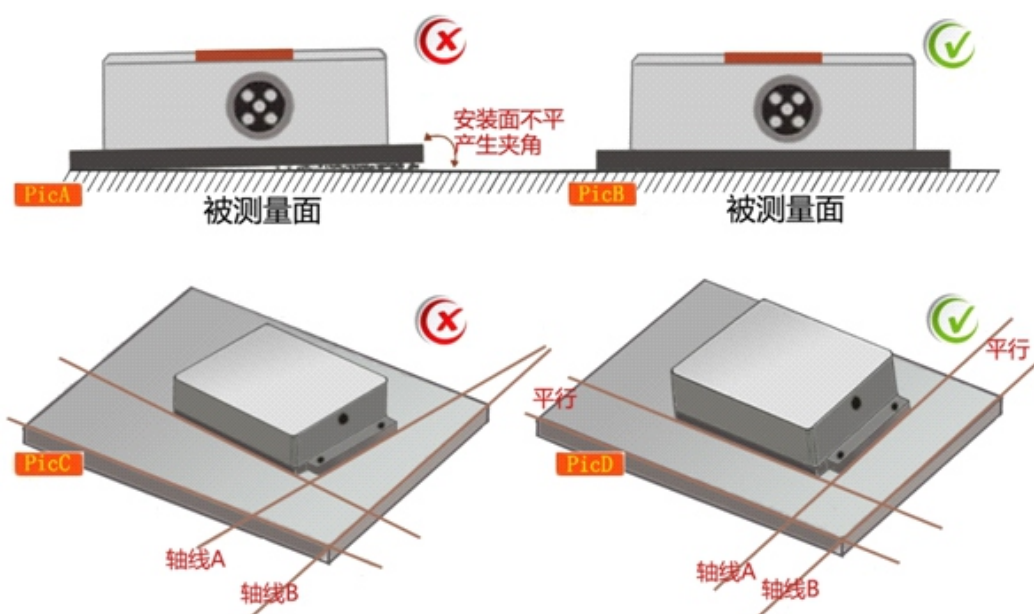
The mounting surface of the sensor must be tight, flat and stable when it is fixed to the surface to be measured.

SENOFEE

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