PST142 Inclinometer

Feature

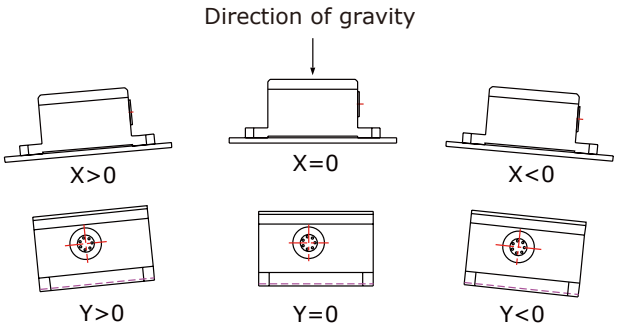
Double-axis
Output: 0.5~4.5VDC
Fully sealed, IP67 protection
Working temp.:-40~85℃
Anti-electromagnetism interference
Anti-power disturbances

PST142 series inclinometer is a high-performance, firm angle measuring alarm equipment, which is designed for low cost application in engineering machine industry. Except satisfy the common application requirement, this type inclinometer adopt kinds of procedure to ensure the reliability and stability, as automotive level MCU, PCB with special protective treatment, tensile cables, automated testing before leave factory, high precision aluminium alloy housing and so on. PST142 series evolves from higher accuracy product-- PST200 series. It has better manufacturing process, test process and mass production ability.

PST142 series is a double-axis alarm inclinometer with 0.5~4.5VDC output. You can choose connector or pigtail. PST142 series inclinometer can directly connect with vehicle battery or other no-regulated supply. It can also be compatible with PLC or data acquisition device, because its very low output impedance, and it allows voltage signal transmit longer distance without distortion.

Application field

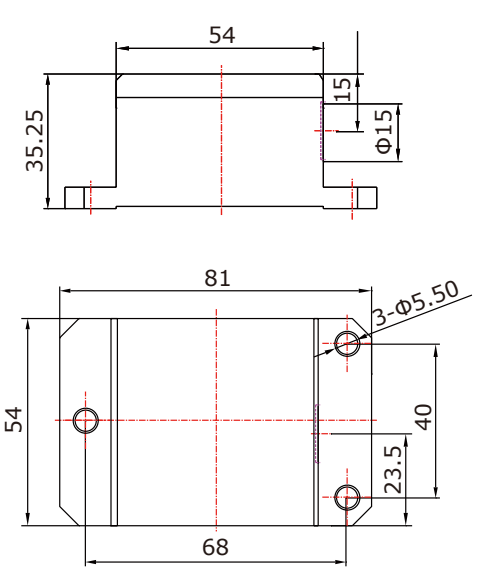
Mine Machine、Food machine、Construction machinery、Farm machine、Factory automation、Transport machinery、Medical facilities



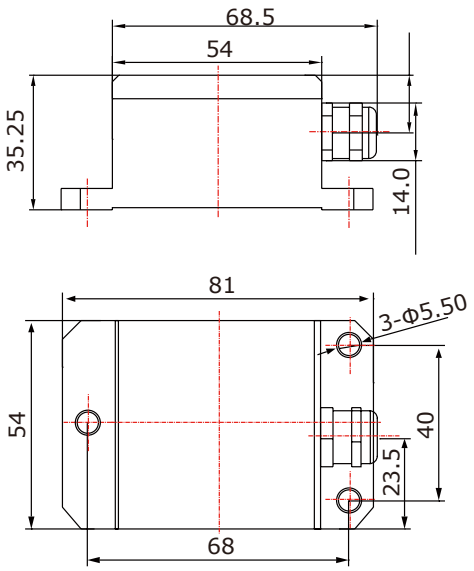
Specifications (Ambient 25 ℃, unless specified)

Product Type	PST142-5	PST142-10	PST142-15	PST142-30	PST142-45	PST142-60
Range	±5°	±10°	±15°	±30°	±45°	±60°
Accuracy（max）	±0.1°	±0.1°	±0.1°	±0.1°	±0.15°	±0.2°
Resolution	0.01°	0.01°	0.01°	0.01°	0.02°	0.02°
Temp. Drift Coefficient	≤100ppm/ ℃	≤100ppm/ ℃	≤100ppm/ ℃	≤ 85ppm/ ℃	≤ 85ppm/ ℃	≤100ppm/ ℃
Axis	Dual-axis					
Response Time	0.3s					
Cross-Axis Error	±0.3%FS					
Output Signal	0.5~4.5VDC					
Refresh Rate	5Hz(optional 10Hz,20Hz)					
Insulation Resistance	100M Ω					
Power Supply	9~36VDC（no-regulated）					
Consumption Current	≤100mA					
Power Rejection Ratio	＞85dB					
Operating Temp.	-40~85℃					
EMC	CE Standard					
Protection Class	IP65/IP67					
Connection	Pigtail（optional Binder 712 connector）2meters cable					
Housing Material	Hard anodized aluminium alloy					
Cable	7 pins PVVC shielded cable					
Dimensions	81x54x35.25mm					
Shock	100g，11ms，3-axis (Standard: GB6587-86)					
Vibration	8g rms, 20~2000Hz (Standard: GB6587-86)					
Weight	240g(Except cable and connector)					
Optional: Temperature Compensation Accuracy @-10~65 ℃ @-40~85 ℃	±0.2°				±0.3°	±0.5°

Dimensions （mm）



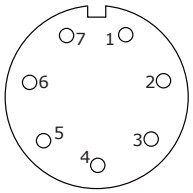
Binder connector



Pigtail connector

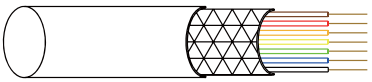
Wirings

Binder connector



Pinning	
Pin	Function
1	Power+
2	Power GND/Signal GND
3	NC
4	Voutx
5	Vouty
6	NC
7	NC

Pigtail connector



Pinning	
Color	Function
Red	Power+
Black	Power GND/Signal GND
Green	NC
Yellow	Voutx
White	Vouty
Blue	NC
Brown	NC

Order

Model	Range	Accuracy@25℃	Lead wire	Axis
PST142-5	±5°	±0.1°	Metal pigtail connector / Binder™ 712 connector	2
PST142-10	±10°	±0.1°	Metal pigtail connector / Binder™ 712 connector	2
PST142-15	±15°	±0.1°	Metal pigtail connector / Binder™ 712 connector	2
PST142-30	±30°	±0.1°	Metal pigtail connector / Binder™ 712 connector	2
PST142-45	±45°	±0.15°	Metal pigtail connector / Binder™ 712 connector	2
PST142-60	±60°	±0.2°	Metal pigtail connector / Binder™ 712 connector	2

Ordering Code:

PST142-xx-P Pigtail cable 2m

PST142-xx-BC Binder connector with 2 m cable

We are here for you. Addresses and Contacts.

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