

FSV3000EV/50mA 系列高精度电压传感器

应用磁通门原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电压。具有超高的精度及线性度，超高的灵敏度及分辨率，极低的失调电流及温度漂移。广泛应用于仪器仪表，医疗设备，计量及校准，实验室，高精度电源，新能源汽车等。

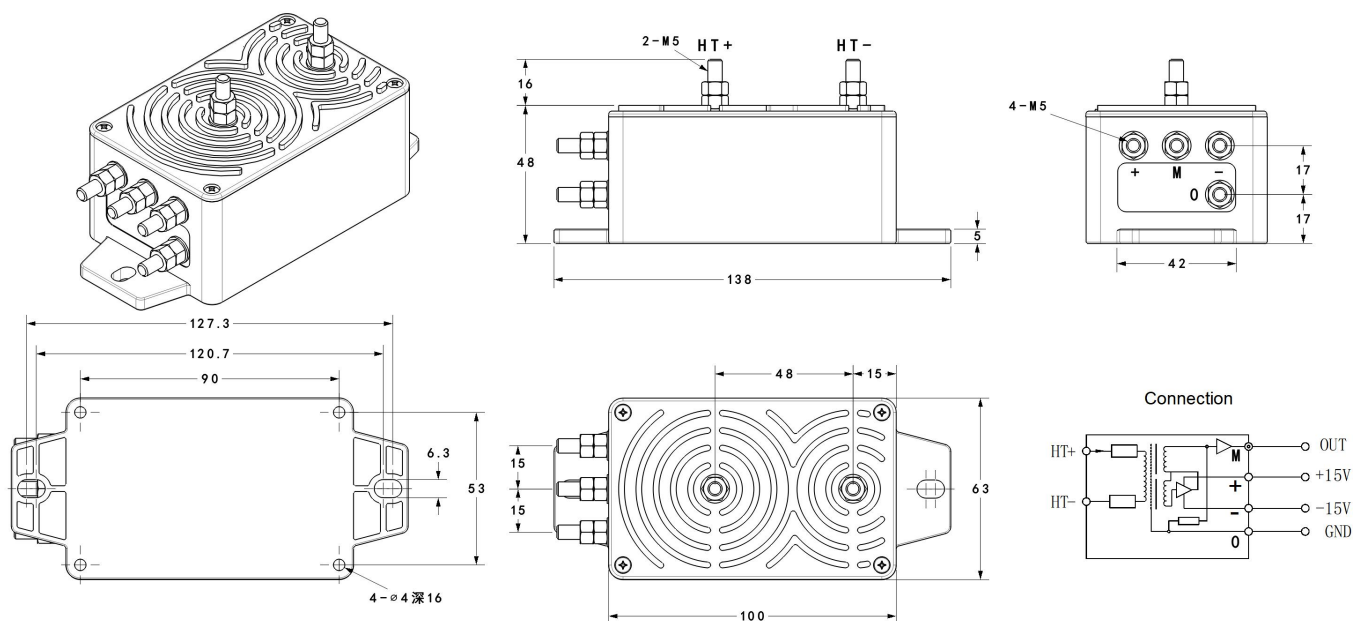


Current sensors applying the fluxgate principle are capable of measuring DC, AC, pulse and various irregular waveforms under galvanic isolation. Voltage They are characterized by high accuracy and linearity, high sensitivity and resolution, very low out-of-phase current and temperature drift. Widely used instrumentation, medical equipment, metrology and calibration, laboratories, high-precision power supplies, new energy vehicles and so on.

电参数/Electrical characteristics								
	型号 Type	FSV050 EV/50mA	FSV200 EV/50mA	FSV500 EV/50mA	FSV1000 EV/50mA	FSV2000 EV/50mA	FSV3000 EV/50mA	
V_{PN}	原边额定输入电压 Primary nominal input voltage	50	200	500	1000	2000	3000	V
V_P	原边电压测量范围 Measuring range of primary	$\pm 150\%$						
I_{PN}	原边额定输入电流 Primary nominal input current	1.0						mA
I_{OUT}	副边额定输出电流 Nominal output current	50						mA
R_M	测量电阻 measuring resistance	$V_C = \pm 15V$ $V_P = \pm 1.0mA$ 时: 50~200						
V_C	电源电压 Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$						V
I_C	电流消耗 Current consumption	$35 + I_{OUT}$						mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间 6kV 有效值/50Hz/1 分钟 Between primary and secondary circuits 6kV RMS/50Hz/1 minute						kV
ε_L	线性度 Linearity	< 0.05						%FS
X	精度 accuracy	$T_A = 25^\circ C$ $V_C = \pm 15V$ ± 0.1						%
I_0	零点失调电流 Zero offset current	$T_A = 25^\circ C$ $< \pm 10$						μA
I_{OT}	失调电流温漂 Offset current temperature drift	$V_P = 0$ $T_A = -25 \sim +85^\circ C$ $< \pm 10$						μA
T_r	响应时间 Response time	< 1						μs
f	频带宽度 (-3dB) Band width (-3dB)	DC~100						kHz

T_A	工作环境温度 Operating ambient temperature	-25~+85						°C
T_S	贮存环境温度 Storage ambient temperature	-40~+100						°C
R_p	输入内阻(约) Input internal resistance	50K	200K	0.5M	1.0M	2.0M	3.0M	Ω
P_p	总输入功耗 Total Input Power	0.05	0.	0.5	1	2	3	W
m	质量(约) weight (approx)	480						g
	标准 standard	GI/FS-0105						

外形尺寸(mm)/Dimensions of drawing(mm)



使用说明/Remarks

1. 传感器错误的接线可能导致模块损坏。

Incorrect wiring may result in damage to the sensor.

2. 传感器通电后，当被测电压从传感器输入 HT+端和 HT-端接入，即可在输出端测得同相电流值。

After the sensor is energized, when the measured voltage is accessed from the HT+ and HT- terminals of the sensor input, the same-phase current value can be measured at the output terminal.

3. 传感器安装使用环境应无导电尘埃及腐蚀性。

Sensor installation and use of the environment should be free of conductive dust and corrosivity.

4. 传感器安装好后，操作人员勿触摸任何裸露导电部分。必要时可对传感器进行防护，如加防护罩等。

Once the sensor is installed, the operator should not touch any exposed conductive parts. If necessary, the sensor can be protected, such as adding a protective cover.