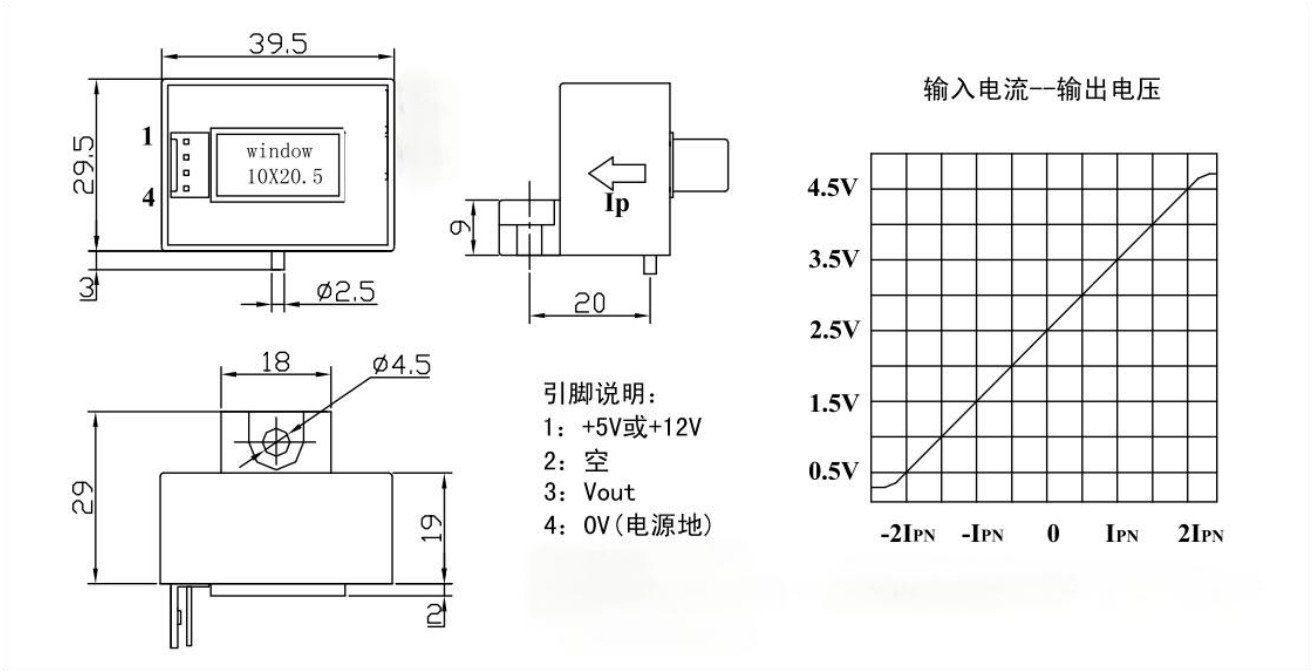
FS200BT系列霍尔电流传感器

应用霍尔效应开环原理的电流传感器，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流。此产品可定制5V-36V宽电压/高精度产品。

Open loop current sensor based on the principle of Hall-effect.It can be used for measuring AC,DC,pulsed and mixed current.

电参数/Electrical characteristics									
	型号 Type	FS050BT	FS100BT	FS200BT	FS300BT	FS400BT	FS500BT	FS600BT	
I_{PN}	原边额定输入电流 Primary nominal input current	50	100	200	300	400	500	600	A
Ip	原边电流测量范围 Measuring range of primary current	0~±100	0~±200	0~±400	0~±600	0~±800	0~±900	0~±900	A
V_{OUT}	副边额定输出电压 Nominal output voltage	±1(±1%)或±2(±1%)							V
Vc	电源电压 Supply voltage	+5V/+12V							V
Ic	电流消耗 Current consumption	20							mA
Va	绝缘电压 Insulation voltage	在原边与副边电路之间2.5KV有效值/50Hz/1分钟							
εL	线性度 Linearity	±1							%FS
Vo	零点失调电压 Offset voltage	TA=25C 2.5V±1%/(输出为VCC 1/2)							V
V_{OM}	磁失调电压 Residual voltage	IPN→0 <±20							mV
V_{OT}	失调电压温漂 Thermal drift of V0	Ip=0 TA=-25～+85℃ <±1							mV/℃
Tr	响应时间 Response time	≤3							μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC～20							kHz
T_A	工作环境温度 Ambient operating temperature	-40～+85							℃
T_S	贮存环境温度 Ambient storage temperature	-40～+125							℃
R_L	负载电阻 Load resistance	≥10K							Ω
	标准 Standard	GI/FS-0105							

外形尺寸(mm)/Dimensions of drawing(mm)



使用说明/Instructions

1. 错误的接线可能导致传感器损坏。传感器通电后，当被测电流从传感器箭头方向穿过，即可在输出端测得同相电压值。
   Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase voltage value can be measured at the output end..
2. 传感器的输出幅度可根据用户需求进行适当的调节。
   The output amplitude of the sensor can be adjusted according to the user's needs.
3. 可按用户需求定制不同额定输入电流和输出电压的传感器。
   Sensors with different rated input current and output voltage can be customized according to user requirements.
4. 原边电流测量范围是在额定输出电压1V状态下。
   The measuring range of the primary current is at the rated output voltage of 1V.