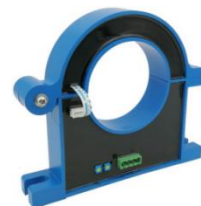


FS20000EK5 系列霍尔可拆卸大电流传感器

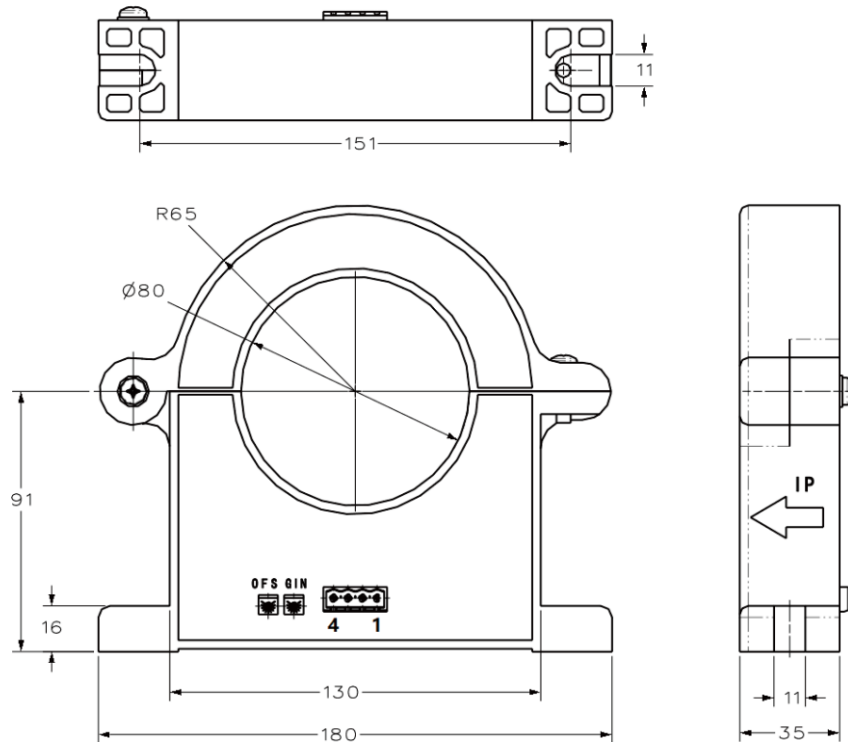
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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	FS500EK5	FS1000EK5	FS5000EK5	FS8000EK5	FS12000EK5	FS20000EK5	
I_{PN}	原边额定输入电流 Primary nominal input current	500	1000	5000	8000	12000	20000	A
I_P	原边电流测量范围 Measuring range of primary current	$0 \sim \pm 1000$	$0 \sim \pm 2400$	$0 \sim \pm 6000$	$0 \sim \pm 10000$	$0 \sim \pm 14000$	$0 \sim \pm 24000$	A
V_{OUT}	副边额定输出电压 Nominal output voltage	4或5 ($\pm 1\%$)						V
V_C	电源电压 Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$						V
I_C	电流消耗 Current consumption	< 50						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 6kV RMS /50Hz/1 min between primary and secondary side circuits						
ϵ_L	线性度 Linearity	< 1						%FS
V_0	零点失调电压 Offset voltage	$T_A = 25^\circ\text{C}$ < 25						mV
V_{OM}	磁失调电压 Residual voltage	$I_{PN} \rightarrow 0$ < 20						mV
V_{OT}	失调电压温漂 Thermal drift of V_0	$I_{PN} = 0$ $T_A = -25 \sim +85^\circ\text{C}$ $< \pm 1$						mV/ $^\circ\text{C}$
T_r	响应时间 Response time	≤ 10						μs
f	频带宽度 (-3dB) Frequency Bandwidth (-3dB)	DC~6						kHz
T_A	工作环境温度 Ambient operating temperature	$-40 \sim +85$						$^\circ\text{C}$
T_s	贮存环境温度 Ambient storage temperature	$-40 \sim +100$						$^\circ\text{C}$
R_L	负载电阻 Load resistance	$\geq 10\text{K}$						Ω
m	质量 (约) Mass (approx.)	1165						g
	标准 Standard	GI/FS-0105						

外形尺寸(mm)/Dimensions of drawing(mm)



引脚说明: 1, +12V 2, -12V 3, Vout 4, 0V(电源地) OFS, 零点调节 GIN, 幅度调节

Elucidation: 1: +12V 2: -12V 3: Vout 4: 0V (GND) OFS: Zero adjustment GIN: Gain adjustment

使用说明/Remarks

- 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.
- 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.
- 由于外壳材料为塑料, 安装时螺栓不要太用力, 以免压坏传感器。
Because the shell material is plastic, the bolt should not be too hard during installation, so as not to crush the sensor.
- 为了达到最佳的测试精度, 过流铜排或电缆应安装在传感器中心位置。
For optimal test accuracy, the overcurrent copper bar or cable should be installed in the center of the sensor.
- 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.