

## FSV800D 系列霍尔电压传感器



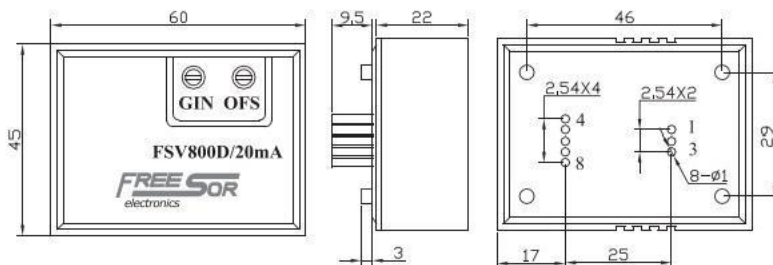
应用霍尔效应闭环原理的电压传感器，能在电隔离条件下测量各种信号的电压。

The voltage sensor based on the closed-loop principle of Hall effect can measure the voltage of various signals under the condition of electrical isolation.

| 电参数/Electrical characteristics |                                                |                                                |                  |                  |                  |                  |                   |                   |          |
|--------------------------------|------------------------------------------------|------------------------------------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|----------|
|                                | 型 号<br>Type                                    | FSV050D                                        | FSV100D          | FSV200D          | FSV300D          | FSV400D          | FSV500D           | FSV800D           |          |
| $V_{PN}$                       | 原边额定输入电压<br>Primary nominal input voltage      | $\pm 50$                                       | $\pm 100$        | $\pm 200$        | $\pm 300$        | $\pm 400$        | 500               | $\pm 800$         | A        |
| $V_P$                          | 原边电压测量范围<br>Measuring range of primary voltage | $0 \sim \pm 100$                               | $0 \sim \pm 200$ | $0 \sim \pm 400$ | $0 \sim \pm 600$ | $0 \sim \pm 800$ | $0 \sim \pm 1000$ | $0 \sim \pm 1000$ | A        |
| $I_{sN}$                       | 副边额定输出电流<br>Secondary nominal output current   | $20 \pm 1\%$                                   |                  |                  |                  |                  |                   |                   | mA       |
| $K_N$                          | 匝数比<br>Conversion ratio                        | 4000:1000                                      |                  |                  |                  |                  |                   |                   |          |
| $R_M$                          | 测量电阻<br>Measuring resistance                   | $V_c = \pm 15V$ 54~360                         |                  |                  |                  |                  |                   |                   | $\Omega$ |
| $V_o$                          | 电源电压<br>Supply voltage                         | $\pm 12 \sim \pm 15 (\pm 5\%)$                 |                  |                  |                  |                  |                   |                   | V        |
| $V_a$                          | 绝缘电压<br>Insulation voltage                     | 在原边与副边电路之间 2.5KV 有效值/50Hz/1 分钟                 |                  |                  |                  |                  |                   |                   |          |
| $\delta_L$                     | 线性度<br>Linearity                               | $< 0.2$                                        |                  |                  |                  |                  |                   |                   | %FS      |
| X                              | 精度<br>Accuracy                                 | $T_A = 25^\circ C$ $V_c = \pm 15V$ $\pm 0.8$   |                  |                  |                  |                  |                   |                   | %        |
| $I_o$                          | 零点失调电流<br>Zero offset current                  | $T_A = 25^\circ C$ $< \pm 0.2$                 |                  |                  |                  |                  |                   |                   | mA       |
| $I_{oT}$                       | 失调电流温漂<br>Thermal drift of $I_o$               | IPN=0 $T_A = -25 \sim +85^\circ C$ $< \pm 0.5$ |                  |                  |                  |                  |                   |                   | mA       |
| $T_r$                          | 响应时间<br>Response time                          | $< 100$                                        |                  |                  |                  |                  |                   |                   | us       |
| $T_A$                          | 工作环境温度<br>Ambient operating temperature        | $-25 \sim +85$                                 |                  |                  |                  |                  |                   |                   | C        |
| $T_s$                          | 贮存环境温度<br>Ambient storage temperature          | $-40 \sim +100$                                |                  |                  |                  |                  |                   |                   | C        |
| $R_s$                          | 副边线圈内阻                                         | $T_A = 85^\circ C$ 50                          |                  |                  |                  |                  |                   |                   | $\Omega$ |

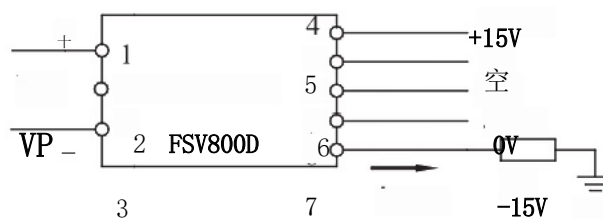
|  |                           |            |  |
|--|---------------------------|------------|--|
|  | Secondary coil resistance |            |  |
|  | 标准<br>Standard            | GI/FS-0105 |  |

#### 外形尺寸(mm)/Dimensions of drawing(mm)



OFS: 零点调节

#### 外部接线图/Connection



#### 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.
- 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.