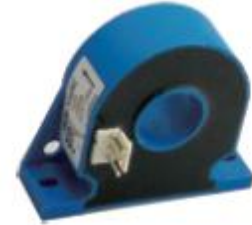


## Toroidal, DC Leakage Current Sensor

The Zibo Yuanxing Electronics **DLS-xxxC** series of DC Leakage current sensors provide highly accurate non-contact DC leakage current measurement.

The DLS series uses a “magnetic modulation” technique to measure DC currents at the milli-ampere level. Shielding and primary to secondary isolation provide a “noise free” secondary output signal proportional to the primary DC current.



### Features:

Capable of milli-ampere level measurements from 10mA to 300mA.

Panel mounted, suitable for harsh operating environments.

### Specifications:

- Output:  $\pm 4.0$  VDC @ rated primary current.  
Optional: any voltage between 0.10 to 7.07V @ rated current
- Dielectric Resistance: 1,000 M ohms @ 500 VDC
- Isolation Voltage: 2500 V<sub>RMS</sub> for 1 minute, 0.5mA
- Surge withstand potential: 5,000V (1.2/50 $\mu$ s standard shock wave)
- Rated Load Resistance:  $\geq 10k$  Ohms.
- Operating Temperature: -25°C to +85°C
- Opening: 20.0mm (0.79")
- Construction:
  - Case material: PBT or ABS (UL flame retardant rating 94-V0)
  - Epoxy encapsulated.

- Power Supply Requirements:
  - $\pm 12$ VDC.
  - < 30mA consumption.
- RoHS compliant



### Performance:

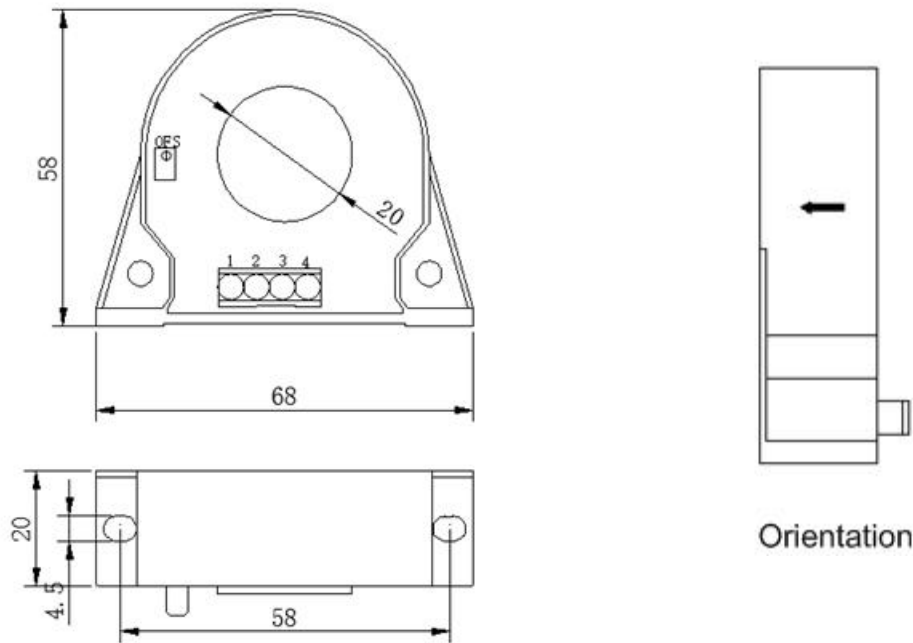
- Accuracy:  $\pm 1.0\%$  (@ 25°C) of rated primary current.
- Linearity: < 0.5% from 10% to 120% of Rated Current
- Response Time: < 350ms

**Custom DC Leakage current sensor designs** are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or the address below.

**Models:**

Part Number	Rated Primary Current	Measurement Range
DLS-0.01C-10mA/ 4V	10mA	0.010mA to 15mAA
DLS-0.02C-20mA/ 4V	20mA	0.010mA to 30mAA
DLS-0.05C-50mA/ 4V	50mA	0.010mA to 75mAA
DLS-0.1C-100mA/ 4V	100mA	0.010mA to 150mAA
DLS-0.2C-200mA/ 4V	200mA	0.010mA to 300mAA
DLS-0.3C-300mA/ 4V	300mA	0.010mA to 450mAA

**Outline Drawing:**



**Connection:**

- #1 – Power supply + input
- #2 - Power supply – input
- #3 – Secondary voltage signal output
- #4 – Ground

**OFS:** Offset for “zero” adjustment