



## CSM100EE Hall-effect Current Sensor Series

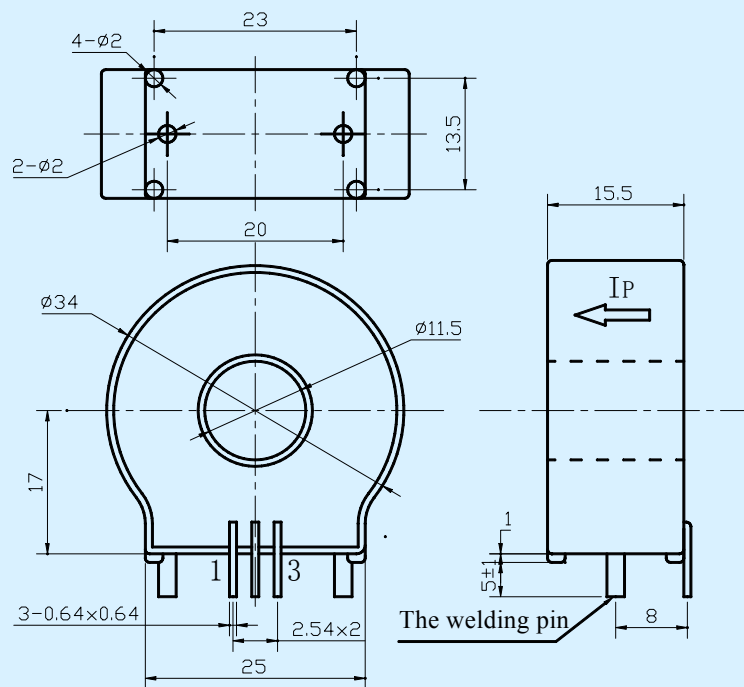


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

### Electrical characteristics

	Type	CSM025EE	CSM040EE	CSM075EE	CSM100EE	
$I_{PN}$	Primary nominal input current	25	50	75	100	A
$I_P$	Measuring range of primary current	$0 \sim \pm 37.5$	$0 \sim \pm 75$	$0 \sim \pm 112.5$	$0 \sim \pm 150$	A
$I_{SN}$	Secondary nominal output current	25	25	37.5	50	mA
$K_N$	Conversion ratio	1:1000	1:2000	1:2000	1:2000	
$R_M$	Measuring resistance ( $V_C = \pm 15V$ )	0-495	0-470	0-290	0-205	$\Omega$
$V_C$	Supply voltage	$\pm 15(\pm 5\%)$				V
$I_C$	Current consumption	$10 + I_S$				mA
$V_D$	Insulation voltage	AC/50Hz/1min				kV
$\varepsilon_L$	Linearity	$< 0.1$				%FS
$X$	Accuracy	$T_A = 25^\circ C$				%
$I_O$	Zero offset voltage	$T_A = 25^\circ C$				mA
$I_{OM}$	Residual current	$I_P \rightarrow 0$				mA
$I_{OT}$	Thermal drift of $I_O$	$I_P = 0 \quad T_A = -25 \sim +85^\circ C$				mA/ $^\circ C$
$T_R$	Response time	$< 1$				us
$f$	Frequency bandwidth(-1dB)	DC~100				kHz
$T_A$	Ambient operating temperature	$-25 \sim +85$				$^\circ C$
$T_S$	Ambient storage temperature	$-40 \sim +100$				$^\circ C$
$R_S$	Secondary coil resistance( $T_A = 25^\circ C$ )	35	60	60	60	$\Omega$
$m$	Mass	25				g
	Standard	Q/320115QHKJ01-2013				

### Dimensions of drawing (mm)



Elucidation: 1: +15V 2: 0V 3:  $I_{OUT}$

### Remarks

- Incorrect connection may lead to the damage of the sensor.
- $I_{SN}$  is positive when the  $I_P$  flows in the direction of the arrow.
- $R_M$  is in the measurement of DC current. If the measurement of AC current,  $R_M$  is reduced to 70%.